INDEX TO VOLUME VIII.

(NEW SERIES.)

[EXPLANATION.—In making out the annexed Index, we have placed every thing relating to CATTLE, under that head—so with HORSES, SHEEP, SWINE, POULTRY, DOMESTIC ECONOMY, BOOKS, PERIODICALS, MANURES, &c. Every article referring in any way to these subjects, will be found arranged under these separate heads.]

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THE

PICTORIAL CULTIVATOR ALMANAC,

FOR

THE UNITED STATES,

FOR THE YEAR

1851.

CALCULATED FOR

BOSTON, NEW-YORK, BALTIMORE, AND CHARLESTON,

AND

ADAPTED FOR GENERAL USE THROUGHOUT THE COUNTRY.

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ECLIPSES IN THE YEAR 1851.

THERE will be two eclipses of the Sun and two of the Moon, this year.

I. Jan. 17, Moon eclipsed at the time of Full Moon, in the morning, in the United States, except the eastern part of Maine, where it will be afternoon. Invisible here, but will be seen in the opposite regions of the globe. Magnitude, 5.58 digits on the Moon's northern limb.

II. February 1, Sun eclipsed at the time of new Moon in the morning, but will be in the evening of Jan. 31, in the states and territories west of the Mississippi river. Invisible in America. The Sun may be seen more or less eclipsed on the southern limb at Australia, the Cape of Good Hope, and the southern part of Madagascar, and on the northern limb, at New-Zealand. This eclipse will be central and annular on the meridian, in longitude 98° 22″ E. from Greenwich, and latitude 58° 23″ S.

III. July 12, evening, and July 13, morning, Moon eclipsed; visible.

Principal Cities.	Beginning.	Middle.	End.
	D. H. M.	D. H. M.	D. H. M.
Eastport,	13 1 22 m.	13 2 53 m	13 4 24
Boston,	13 1 6 m.	13 2 37 m.	13 4 8
New-York,	13 0 54 m.	13 2 25 m.	13 3 56
Philadelphia,	13 0 49 m.	13 2 20 m.	13 3 51
Baltimore,	13 0 43 m.	13 2 14 m.	13 3 45
Washington,	13 0 42 m.	12 2 13 m.	13 3 44
Richmond,	13 0 40 m.	13 2 11 m.	13 3 42
Rochester,	13 0 39 m.	13 2 10 m.	13 3 41
Raleigh,	13 0 35 m.	13 2 6 m.	13 3 37
Charleston, Pittsburgh,	13 0 30 m.	13 2 1 m.	13 3 32
Cleveland,	13 0 24 m.	13 1 55 m.	13 3 26
Detroit,	12 0 18 m.	13 1 49 m.	13 3 20
Milledgeville,	13 0 17 m.	13 1 48 m.	13 3 19
Lexington,	13 0 13 m.	13 1 44 m.	13 3 15
Cincinnati,	13 0 12 m.	13 1 43 m.	13 3 14
Indianapolis,	13 0 6 m.	13 1 37 m.	13 3 8
Nashville,	13 0 3 m.	13 1 34 m.	13 3 5
Chicago,	12 11 59 ev	13 1 30 m.	13 3 1
Mobile,	12 11 57 ev	13 1 28 m.	13 2 59
St. Louis,	12 11 52 ev	13 1 23 m	13 2 54
New-Orleans,	12 11 50 ev	13 1 21 m.	13 2 52
Austin,	12 11 19 ev	13 0 50 m.	13 2 21
San Francisco,	12 9 43 ev	12 11 14 ev	13 0 45

Magnitude, 8.47 digits on the Moon's southern limb.

IV. July 28, morning, Sun eclipsed; visible more or less throughout the U. States, with the exception of the southern part of Florida, on the Sun's northern limb.

Cities in the order of Latitude.	Beginning.	Greatest Eclipse.	End.	Duration.	Magnitude.
	H. M.	H. M.	H. M.	H. M.	Digs.
Eastport,	8 7	9 3	10 1	1 54	4.53
Montpelier,	7 41	8 35	9 31	1 50	4.46
Concord,	7 46	8 38	9 32	1 46	4.00
Rochester,	7 16	8 7	9 0	1 44	4.53
Milwaukie,	6 30	7 21	8 14	1 44	5.23
Buffalo,	7 10	8 1	8 54	1 44	4.47
Albany,	7 24	8 26	9 20	1 46	4.02
Detroit,	6 51	7 41	8 33	1 42	4 66
Boston,	7 49	8 40	9 34	1 45	3.79
Providence,	7 48	8 37	9 29	1 41	3 52
Chicago,	6 29	7 18	8 10	1 41	4.81
Iowa city,	6 12	7 0	7 51	1 39	5.07
New-Haven,	7 39	8 27	9 18	1 39	3.54
New-York,	7 34	8 21	9 12	1 38	3 42
Pittsburgh,	7 4	7 51	8 42	1 38	3.79
Philadelphia,	7 29	8 15	9 4	1 35	3.32
Indianapolis,	6 37	7 24	8 14	1 37	4.28
Baltimore,	7 23	8 7	8 53	1 30	3 12
Cincinnati,	6 45	7 30	8 18	1 33	3 69
Washington,	7 21	8 5	8 51	1 30	3.01
St. Louis,	6 21	7 6	7 54	1 33	4.03
Lexington,	6 46	7 29	8 16	1 30	3.39
Richmond,	7 20	8 1	8 45	1 25	2.57
Nashville,	6 36	7 16	7 59	1 23	2.95
Raleigh,	7 16	7 52	8 32	1 16	2.10
Little Rock,	6 10	6 49	7 31	1 21	3.02
Milledgeville,	6 56	7 28	8 2	1 6	1.65
Charleston,	7 16	7 42	8 10	0 54	1.05
Mobile,	6 36	7 2	7 31	0 55	1.24
Austin,	5 49	6 21	6 55	1 6	2.20
New-Orleans,	6 28	6 53	7 21	0 53	1.06
St. Augustine,	7 3	7 22	7 43	0 40	0.67

At Astoria in Oregon, this eclipse will be chiefly visible. The Sun will rise there at 4h. 40m. with 7.01 digits eclipsed, and at 4h. 58m. it will be 9.18 digits eclipsed. The eclipse will end at 5h. 49m. At San Francisco, the Sun will rise at 5h. 2m. with an eclipse of 6.65 digits diminishing, which will end at 5h. 43m. This eclipse will be more or less visible throughout Europe, and in the northern part of Africa. It will be central and total on the meridian in longitude 33 deg. 43 m. west from Greenwich, and latitude 69 deg. 54 min. north.

RISING AND SETTING OF PLANETS, &c.

THE reader should understand that these are not materially affected by the *longitude* of a place: and also that when the hour is less than 6, it is in the morning; and when greater than 6, it is in the evening.

Date.	Planet.	Boston.	Washington.	Charleston.
		H. M.	H. M.	H. M.
Jan. 14,	Venus rises,	4 41	4 34	4 22
" 24,	"	4 23	4 15	4 3
Feb. 5,	Saturn sets,	10 20	10 18	10 15
" 12,	Venus rises,	4 13	4 5	3 52
" 20,	Jupiter rises,	9 49	9 46	9 41
" 28,	"	9 15	9 12	9 8
Mar. 4,	"	8 58	8 55	8 50
" 11,	Venus rises,	4 14	4 6	3 54
" 19,	"	4 12	4 5	3 54
" 27,	"	4 8	4 2	3 53
April 9,	"	3 58	3 54	3 48
" 24,	"	3 43	3 41	3 39
May 3,	"	3 32	3 32	3 33
" 14,	"	3 19	3 21	3 25
" 22,	"	3 4	3 9	3 16
June 4,	"	2 58	3 4	3 14
" 14,	"	2 51	2 59	3 12
" 25,	"	2 49	2 59	3 14
July 5,	"	2 52	3 3	3 19
" 16,	"	3 3	3 14	3 31
" 18,	Jupiter sets,	10 58	11 0	11 3
Aug. 2,	"	10 3	10 5	10 8
" 7,	Saturn rises,	10 25	10 30	10 37
" 8,	Jupiter sets,	9 41	9 43	9 47
" 22,	Seven Stars rise,	9 58	10 9	10 27
Sept. 5,	"	9 3	9 14	9 32
" 18,	"	8 11	8 23	8 40
" 25,	"	7 44	7 55	8 13
Oct. 6,	Mars rises,	11 2	11 12	11 29
" 14,	"	10 50	11 0	11 17
" 25,	"	10 32	10 42	10 58
Nov. 6,	"	10 9	10 19	10 34
" 14,	"	9 51	10 0	10 15
" 27,	"	9 17	9 26	9 40
Dec. 6,	"	8 48	8 57	9 11
" 18,	"	8 1	8 10	8 25

PHENOMENA OF THE PLANETS FOR 1851.

JAN. 4, ♅ stat.; 5, ♀ stat. □ ☉ ♄; 6, ☿'s gr. elong.; 12, □ ☉ ♃, ☿ stat.; 16, □ ☉ ♅; 20, ☉ enters ♒; 22, inf. ☌ ☉ ☿. FEB. 2, ☿ stat.; 7, ♃ stat.; 15, ☿'s gr. elong.; 19, ☉ enters ♓; 25, ♀'s gr. elong. MARCH 20, ☉ enters ♈. APRIL 1, sup. ☌ ☉ ☿; 8, ☌ ☉ ♃; 14, ☌ ○ ♄; 20, ☉ enters ♉, ☌ ☉ ♅; 28, ☿'s gr. elong. MAY 9, ☿ stat.; 20, inf. ☌ ☉ ☿; 21, ☉ enters ♊. JUNE 1, ☿ stat.; 10, ♃ stat.; 15, ☿'s gr. elong.; 21, ☉ enters ♋. JULY 6, □ ☉ ♃; 15, sup. ☌ ☉ ☿; 23, ☉ enters ♌; □ ○ ♄, □ ☉ ♅; 28, ☉ eclipsed, vis. AUG. 10, ♅ stat.; 17, ♄ stat.; 23, ☉ enters ♍; 26, ☿'s gr. elong. SEPT. 8, ☿ stat.; 22, inf. ☌ ☉ ☿; 23, enters ♎; 30, sup. ☌ ☉ ♀, ☿ stationary. OCT. 7, ☿'s gr. elong.; 23, □ ☉ ♐, ☉ enters ♏; 24, ☌ ☉ ♄; 26, ☌ ☉ ♅; 27; ☌ ☉ ♃. NOV. 7, sup. ☌ ☉ ☿; 22, ☉ enters ♐. DEC. 16, ♂ stat.; 20, ☿'s gr. elong.; 22, ☉ enters ♑; 27, ☿ stat.; 31, ♄ stationary.

SIGNS OF THE ZODIAC.

♈ Aries; ♉ Taurus; ♊ Gemini; ♋ Cancer; ♌ Leo; ♍ Virgo; ♎ Libra; ♏ Scorpio; ♐ Sagittarius; ♑ Capricorn; ♒ Aquarius; ♓ Pisces.

CHARACTERS.

☉ Sun; ☽ Moon; ☿ Mercury; ♀ Venus; ⊕ Earh; ♂ Mars; ♃ Jupiter; ♄ Saturn; ♅ Herschel.

EQUINOXES AND SOLSTICES FOR 1851.

EQUINOXES AND SOLSTICES.		LONDON.			BOSTON.			WASHINGTON.			CINCINNATI.			SAN FRANCISCO.		
		D.	H.	M.	D.	H.	M.	D.	H.	M.	D.	H.	M.	D.	H	M.
Vernal Equinox,	March,....	21	4	55 mo	21	0	11 mo	20	11	47 ev	20	11	17 ev	20	8	47 ev
Summer Solstice,	June, ...	22	1	41 mo	21	8	57 ev	21	8	33 ev	21	8	3 ev	21	5	33 ev
Autumnal Equinox,	Sept.,.....	23	3	51 ev	23	11	7 mo	23	10	43 mo	23	10	13 mo	23	7	43 mo
Winter Solstice,	Dec., ...	22	9	29 mo	22	4	45 mo	22	4	21 mo	22	3	51 mo	22	1	21 mo

When it is noon at London, it is 6 h. 52 m. in the morning at Washington; and when it is noon at Washington, it is 5 h. 8 m. in the evening at London.

TABLE OF THE SOLAR SYSTEM.

NAME.	Mean diameter in Eng. mi's	Mean distance from the Sun.	Time of revolution round the Sun.	Light & heat, earth being 1.
			D. H. M. S.	
The Sun,..	883,246	.....		
Mercury,..	3,224	37,000,000	87 23 15 43	6.67
Venus,....	7,687	68,000,000	224 16 49 10	1.91
The Earth,	7,912	95,000,000	365 6 9 12	1.
The Moon,	2,180	95,000,000	365 6 9 12	1.
Mars, ...	4,189	144,000,000	686 23 30 35	0.43
Vesta,.....	238	224,340,600	1,325 11 38 24	.....
Iris, ...	unknown.	226,000,000	1,327 23 22 41	....
Hebe, ...	"	230,000,000	1,375 nearly,	.....
Flora, ...	"	240,000,000	1,469 18 37 19	.....
Astræ, ...	"	216,000,000	1,512 nearly.	0.16
Juno, ...	1,425	253,598,700	1,593 1 36 28	.....
Ceres, ...	160	263,236,450	1,684 17 38 24	.....
Pallas,* ...	110	265,000,000	1,686 7 19 12	.....
Jupiter, ...	89,170	490,000,000	4,332 14 27 10	0.037
Saturn,....	79,042	900,000,000	10,759 1 51 11	0.011
Uranus, ...	35,112	1,800,000,000	30,686 19 41 32	0.003
Neptune,..	35,000	2,850,000,000	60,128 3 20 02	0.001

* A ninth asteroid, named Metis, and also a tenth not yet named, have been discovered since the beginning of 1848, between Mars and Jupiter; but as the sizes, distances, etc., are yet unknown, they have not been added to the table.

NOTES TO THE READER.

The astromical calculations for this Almanac, in equal or clock time, were made by DAVID YOUNG, of Hanover Neck, New-Jersey, and the calendar page is adapted for use in every part of the United States. It is based on the fact, that in the same *Latitude, that is, on a line running due east and west, the Sun and Moon rise and set at the same moment by the clock or almanac*, not only through the United States, but around the world—the variations being so small as to be of no importance for ordinary purposes. Thus, if on any day the Sun rises at Boston at 5 minutes past 6, it rises at 5 minutes past 6 on the same line of latitude westward throughout the states of Massachusetts, New-York, Michigan, Iowa, and Oregon.

Hence, a Calendar adapted to Boston for New England, is equally adapted, as to the rising and setting of the Sun and Moon, for use in Northern New-York and Michigan; a Calendar for New-York city is adapted for use in the states of Pennsylvania, Ohio, Indiana, and Illinois; a Calendar for Baltimore is adapted for Virginia, Kentucky, and Missouri; and a Calendar for Charleston will answer for North Carolina, Tennessee, Georgia, Alabama, and Louisiana. Wherever the reader is, look for the state at the top of the Calendar page, and underneath are the rising and setting of the Sun and Moon sufficiently accurate for all practical purposes.

The *changes, fulls, and quarters of the Moon*, however, are governed by another principle, and are essentially the same for all places on the same *Longitude;* that is, on any line extending due north and south. Thus, the Moon's phases for Charleston, suit Pittsburgh, etc. Any phasis takes place at the same instant of absolute time; but the local time is earlier at the westward, and later at the eastward, at the rate of *four minutes for each degrees of Longitude;* or at the rate of *one minute* for every 12 miles 273 rods in the latitude of Boston; 13 miles and 60 rods in the latitude of New-York city; 13 miles 143 rods in the latitude of Baltimore; and 14 miles 199 rods in the latitude of Charleston.

TIDE TABLE.

CHIEFLY FROM THE TABLE IN BOWDITCH'S NAVIGATOR.

The Calendar pages exhibit the time of high water at New-York, Boston, and Charleston.

To find the time of high water at any of the following places, add to or subtract from the time of high water at New-York, as follows: (A signifies that the annexed quantity of time is to be added, S subtracted)—For

	H.M.		H.M.
Amelia Harbor,	S 0 24	Machias,	A 2 6
Ann, Cape,	A 2 36	Marblehead,	A 2 30
Annapolis,	A 2 6	May, Cape,	S 0 9
Anticosti Island, west end,	S 5 24	Mount Desert,	A 2 6
St. Augustine,	S 1 24	New-Bedford,	S 1 17
Block Island,	S 1 17	Newburyport,	A 2 21
Boston,	A 2 36	New-Haven,	A 1 22
Canso, Cape,	S 0 24	Norwich Landing,	A 0 45
Charles, Cape,	S 1 9	Passamaquoddy River,	A 2 36
Charlesten Bar,	S 1 39	Penobscot River,	A 1 51
Cod, Cape,	A 2 36	Philadelphia,	A 5 0
Delaware River, ent.	A 0 6	Plymouth,	A 2 36
Fairfield,	A 2 0	Portland,	A 1 51
Fear, Cape,	S 0 54	Port Royal Island,	S 0 39
Florida Keys,	S 0 4	Portsmouth,	A 2 21
Gay Head,	S 1 17	Quebec, Canada,	S 0 5
George's River,	A 1 51	Rhode Island,	S 2 9
Georgetown Bar,	S 1 54	Roman, Cape,	S 9 54
Goldsborough,	A 2 6	Sable, Cape,	S 0 54
Guilford,	A 1 30	Salem,	A 2 36
Halifax, N. S.,	S 1 24	Sandy Hook, N. J.,	S 2 17
Hartford,	S 5 40	Saybrook,	A 0 15
Hatteras, Cape,	A 0 6	St. Johns, N. F.,	S 2 54
Henlopen, Cape,	S 0 9	St. Simon's Bar,	S 1 24
Henry, Cape,	S 1 14	Sunbury,	A 0 36
Kennebec,	A 1 54	Townsend,	A 1 51
Lookout, Cape,	A 0 6		

APOGEE AND PERIGEE OF THE SUN.

The Sun is in			Miles.
Perigee December	31, 1850,	distance from the Earth, ...	93,582,000
Apogee July	1, 1851,	" " " ...	96,771,000
Perigee January	2, 1852,	" " " ...	93,575,000

The perigee does not occur in 1851, but occurs twice in 1852.

EQUATION OF TIME.

ALMANACS often contain the expresssion, "*sun fast,*" and "*sun slow.*" They refer to the difference of time as shown by the sun, and as shown by a good clock or watch. Time as marked by the *former*, is called "*apparent,*" and as marked by the *latter*, "*mean time.*" A good *sundial* will always tell the *former;* a *watch* or *clock*, the *latter*. The calculations of most almanacs are given in *mean* or clock time.

CHRONOLOGICAL CYCLES.

Dominical Letter, E; Golden Number, or Lunar Cycle, 9; Epact, 28; Solar Cycle, 12; Roman Indiction, 9; Julian Period, 6564.

ASPECTS AND NODES.

☌ Conjunction; ✱ Sextile, 60 degrees; □ Quartile, 90 degrees; △ Trine, 120 degrees; Vc. Quincunx, 150 degrees; ☍ Opposition, 180 degrees; ☊ Ascending Node; ☋ Descending Node.

LEAP YEAR.

Every year is *leap-year* the number of which can be divided by 4, and not by 100; or which can be divided by 400.

Anger is like rain, which breaks itself upon that on which it falls.

1st MONTH. **JANUARY, 1851.** **31 Days.**

MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIMORE.	CHARLESTON.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
New Moon, ...	2 6 0 mo.	5 48 mo.	5 37 mo.	5 24 mo.	1 ev. 3 50
First Quarter,.	10 11 37 mo.	11 25 mo.	11 14 mo.	11 1 mo.	9 0 7 25
Full Moon,....	17 11 58 mo.	11 46 mo.	11 35 mo.	11 22 mo.	17 0 10 23
Third Quarter,	24 3 33 mo.	3 21 mo.	3 10 mo.	2 57 mo.	25 0 12 37

In this month, the principal work requiring the farmer's attention, is, 1 The management and care of domestic animals—2. Threshing and securing grain from rats—3. Pruning and care of fruit trees—4. Repairing tools, and other in-door work.

Day of Month.	Day of Week.	Sun's declina'n S.	Moon's Place.	CALENDAR For Boston, New-England New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.				CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
				Sun rises.	Sun sets.	Moon rises.	H. W. Bos'n.	Sun rises.	Sun sets.	Moon rises.	H. W. N.Y'k	Sun rises.	Sun sets.	Moon rises.	H. W. Ch'ton	Sun rises.	Sun sets.	Moon rises.	H. W. Ch'ton
		° ′ ″		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	Wednesday.	23 1 14	♑	7 32	4 36	6 38	11 6	7 27	4 41	6 33	8 6	7 23	4 45	6 30	7 55	3 6	14 7 6		
2	Thursday ..	22 56 4	♑	7 32	4 36	sets	11 47	7 27	4 42	sets	8 47	7 23	4 46	sets	7 55	4 sets	7 47		
3	Friday	22 50 26	♒	7 32	4 37	5 55	morn	7 27	4 43	6 1	9 27	7 23	4 47	6 5	7 55	4 6	21 8 27		
4	Saturday...	22 44 21	♒	7 32	4 38	6 51	0 27	7 27	4 44	6 56	10 3	7 23	4 48	7 0	7 55	5 7	15 9 3		
5	E	22 37 49	♓	7 32	4 39	7 49	1 3	7 27	4 45	7 53	10 35	7 23	4 49	7 56	7 55	6 8	8 9 35		
6	Monday	22 30 51	♓	7 32	4 40	8 47	1 35	7 27	4 46	8 50	11 10	7 23	4 49	8 53	7 65	7 9	2 10 10		
7	Tuesday ...	22 23 25	♓	7 32	4 41	9 45	2 10	7 27	4 47	9 47	11 46	7 23	4 50	9 49	7 65	8 9	56 10 46		
8	Wednesday.	22 15 33	♈	7 32	4 42	10 44	2 46	7 27	4 48	10 45	morn	7 23	4 51	10 46	7 65	9 10	49 11 22		
9	Thursday ..	22 7 15	♈	7 32	4 43	11 43	3 22	7 27	4 49	11 44	0 22	7 23	4 52	11 44	7 65	9 11	44 morn		
10	Friday	21 58 31	♉	7 31	4 44	morn	4 1	7 26	4 50	morn	1 1	7 22	4 53	morn	7 65	10	morn 0 1		
11	Saturday...	21 49 21	♉	7 31	4 46	0 44	4 44	7 26	4 51	0 44	1 44	7 22	4 54	0 43	7 55	11	0 40 0 44		
12	E	21 39 46	♉	7 31	4 47	1 47	5 37	7 26	4 52	1 46	2 37	7 22	4 55	1 44	7 55	12	1 38 1 37		
13	Monday	21 29 46	♊	7 31	4 48	2 53	6 48	7 25	4 53	2 50	3 48	7 22	4 56	2 48	7 55	13	2 39 2 48		
14	Tuesday ...	21 19 20	♊	7 30	4 49	4 0	7 57	7 25	4 54	3 57	4 57	7 21	4 58	3 54	7 55	14	3 42 3 57		
15	Wednesday.	21 8 30	♋	7 30	4 50	5 8	9 6	7 25	4 55	5 4	6 6	7 21	4 59	5 1	7 55	15	4 46 5 6		
16	Thursday ..	20 57 16	♋	7 29	4 51	6 14	10 4	7 24	4 56	6 9	7 4	7 21	5 0	6 6	7 55	16	5 50 6 4		
17	Friday	20 45 38	♌	7 29	4 52	rises	10 55	7 24	4 57	rises	7 55	7 20	5 1	rises	7 45	17	rises 6 55		
18	Saturday...	20 33 37	♌	7 28	4 54	6 23	11 45	7 23	4 58	6 27	8 45	7 20	5 2	6 31	7 45	17	6 45 7 45		
19	E	20 21 12	♍	7 28	4 55	7 38	ev 34	7 23	5 0	7 42	9 34	7 19	5 3	7 45	7 45	18	7 55 8 34		
20	Monday	20 8 24	♍	7 27	4 56	8 53	1 22	7 22	5 1	8 55	10 22	7 19	5 4	8 57	7 45	19	9 4 9 22		
21	Tuesday ...	19 55 13	♎	7 26	4 57	10 6	2 9	7 22	5 2	10 7	11 9	7 18	5 5	10 8	7 35	20	10 11 10 9		
22	Wednesday.	19 41 41	♎	7 26	4 59	11 16	2 56	7 21	5 3	11 16	11 56	7 18	5 6	11 16	7 35	21	11 15 10 56		
23	Thursday ..	19 27 46	♏	7 25	5 0	morn	3 44	7 20	5 4	morn	ev 44	7 17	5 8	morn	7 25	22	morn 11 44		
24	Friday	19 13 30	♏	7 24	5 1	0 24	4 32	7 20	5 6	0 23	1 32	7 16	5 9	0 22	7 25	23	0 17 ev 32		
25	Saturday...	18 58 52	♐	7 23	5 2	1 30	5 28	7 19	5 7	1 28	2 28	7 16	5 10	1 26	7 15	24	1 18 1 28		
26	E	18 43 54	♐	7 22	5 4	2 34	6 34	7 18	5 8	2 31	3 34	7 15	5 11	2 28	7 15	25	2 17 2 34		
27	Monday	18 28 35	♐	7 21	5 5	3 35	7 44	7 17	5 9	3 31	4 44	7 14	5 12	3 28	7 05	26	3 14 3 44		
28	Tuesday ...	18 12 56	♐	7 21	5 6	4 32	9 0	7 16	5 10	4 28	6 00	7 13	5 14	4 25	7 05	27	4 9 5 0		
29	Wednesday.	17 56 57	♑	7 20	5 8	5 26	10 5	7 16	5 12	5 21	7 05	7 13	5 15	5 18	6 59	5 28	5 1 6 5		
30	Thursday ..	17 40 40	♑	7 19	5 9	6 14	10 55	7 15	5 13	6 9	7 55	7 12	5 16	6 6	6 59	5 29	5 50 6 55		
31	Friday.....	17 24 3	♒	7 18	5 10	6 57	11 36	7 14	5 14	6 52	8 36	7 11	5 17	6 49	6 58	5 30	6 34 7 36		

TO SAVE FUEL.

After trying many ways of heating rooms, a sheet iron stove has been found most saving of wood. But such a stove, unless perpetually regulated, is very flashy—too hot or too cold. Race's Self-Regulating Stove, removes all difficulties—we have found it to heat a room from zero to mild summer heat in five minutes, and then to maintain this temperature evenly all day. It requires only about half the fuel needed for a good hot-air furnace with eight drums. With coarse wood, it will keep a slow fire all night. By turning the register, which is done in one second, the heat may be kept steadily at any desired temperature. When the fire burns too fast, its heat shuts down the valve; if too slow, up goes the valve and lets in a whiff of wind, and it blazes afresh.

Two precautions are needed—one to reverse the pipe joints, to prevent the dropping of the liquid soot; and the other, not to put in at once so much wood as to prevent a faint draught at the valve, which will prevent puffs and explosions.

KEEPING AND SETTLING ACCOUNTS.

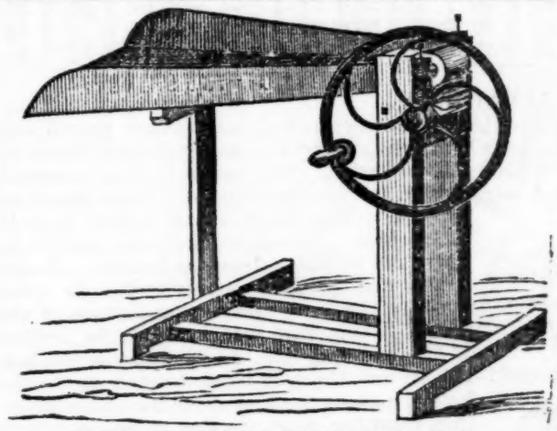
We have, for a long series of years, watched pretty narrowly the habits of many farmers, and we have found that those who keep constant and accurate accounts, and settle regularly and punctually with their neighbors, also keep all their farm operations in neat and regular order. On the other hand, those who are careless and slack in settling or paying their debts, also keep a slip-shod account with every part of their farms—no system, no clock-work regularity is maintained in their yearly routine of work. They also waste time in hunting for displaced tools, waste money by doing work out of season, and waste happiness by fretting over the disorder and confusion which their own hands have created. To avoid these evils, begin the year anew, by settling in some shape or other with every debtor and cr ditor—and keep a strict and careful account with every body, but more especially with yourselves—and lay out all work with regularity, and execute it with energy.

2d Month. **FEBRUARY, 1851.** **28 Days.**

MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIMORE.	CHARLESTON.	SUN ON MERIDIAN
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
New Moon, ...	1 1 18 mo.	1 6 mo.	0 55 mo.	0 42 mo.	1 0 13 53
First Quarter,.	9 4 12 mo.	4 0 mo.	3 49 mo.	3 36 mo.	9 0 14 31
Full Moon, ...	15 10 44 ev.	10 32 ev.	10 21 ev.	10 8 ev.	17 0 14 18
Third Quarter,	22 4 54 ev.	4 42 ev.	4 31 ev.	4 18 ev.	25 0 13 20

If not already done, cut grafts, prune grapes, and tread snow round trees. Examine apples in cellars, and select and use those beginning to decay. See to vegetables in cellars, that they are neither getting dry, nor decaying from too much moisture.

Day of Month.	Day of Week.	Sun's declina'n S.	Moon's Place.	CALENDAR For Boston, New-England New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.			CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
				Sun rises.	Sun sets.	Moon sets.	H. W. Bost'n	Sun rises.	Sun sets.	Moon sets.	H. W. N.Y'k	Sun rises.	Sun sets.	Moon sets.	Sun rises.	Sun sets.	Moon sets.	H. W. Ch'ton
		° ′ ″		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	Saturday..	17 7 8	♒	7 17	5 12	sets	morn	7 13	5 15	sets	9 13	7 10	5 18	sets	6 57	5 31	sets	8 13
2	E	16 49 55	♓	7 16	5 13	6 39	0 13	7 12	5 17	6 43	9 49	7 9	5 19	6 46	6 57	5 32	6 56	8 49
3	Monday ...	16 32 24	♓	7 15	5 14	7 37	0 49	7 11	5 18	7 40	10 19	7 8	5 21	7 42	6 56	5 33	7 50	9 19
4	Tuesday ..	16 14 36	♈	7 13	5 16	8 36	1 19	7 10	5 19	8 37	10 50	7 7	5 22	8 39	6 55	5 34	8 43	9 50
5	Wednesday	15 56 32	♈	7 12	5 17	9 34	1 50	7 9	5 20	9 35	11 22	7 6	5 23	9 36	6 54	5 35	9 37	10 22
6	Thursday .	15 38 10	♈	7 11	5 18	10 34	2 22	7 8	5 22	10 34	11 54	7 5	5 24	10 34	6 54	5 36	10 32	10 54
7	Friday....	15 19 33	♉	7 10	5 20	11 35	2 54	7 7	5 23	11 34	morn	7 4	5 25	11 33	6 53	5 36	11 27	11 27
8	Saturday..	15 0 41	♉	7 9	5 21	morn	3 27	7 5	5 24	morn	0 27	7 3	5 27	morn	6 52	5 37	morn	morn
9	E	14 41 34	♊	7 7	5 22	0 38	4 5	7 4	5 25	0 35	1 5	7 2	5 28	0 34	6 51	5 38	0 25	0 5
10	Monday ...	14 22 11	♊	7 6	5 23	1 42	4 50	7 3	5 27	1 39	1 50	7 1	5 29	1 36	6 50	5 39	1 25	0 50
11	Tuesday ..	14 2 35	♋	7 5	5 25	2 47	5 49	7 2	5 28	2 44	2 49	7 0	5 30	2 41	6 49	5 40	2 27	1 49
12	Wednesday	13 42 44	♋	7 4	5 26	3 52	7 5	7 1	5 29	3 48	4 5	6 58	5 31	3 44	6 48	5 41	3 29	3 5
13	Thursday .	13 22 41	♌	7 2	5 27	4 54	8 26	6 59	5 30	4 50	5 26	6 57	5 32	4 46	6 48	5 42	4 31	4 26
14	Friday....	13 2 24	♌	7 1	5 29	5 50	9 42	6 58	5 32	5 46	6 42	6 56	5 34	5 43	6 47	5 43	5 29	5 42
15	Saturday..	12 41 55	♍	7 0	5 30	rises	10 41	6 57	5 33	rises	7 41	6 55	5 35	rises	6 46	5 44	rises	6 41
16	E	12 21 14	♍	6 58	5 31	6 25	11 31	6 55	5 34	6 28	8 31	6 53	5 36	6 31	6 45	5 45	6 40	7 31
17	Monday ...	12 0 20	♎	6 57	5 33	7 42	ev 21	6 54	5 35	7 44	9 21	6 52	5 37	7 45	6 44	5 46	7 50	8 21
18	Tuesday ..	11 39 16	♎	6 55	5 34	8 56	1 7	6 53	5 36	8 57	10 7	6 51	5 38	8 57	6 43	5 46	8 58	9 7
19	Wednesday	11 18 0	♏	6 54	5 35	10 8	1 52	6 51	5 38	10 7	10 52	6 50	5 39	10 7	6 42	5 47	10 4	9 52
20	Thursday .	10 56 34	♏	6 52	5 36	11 17	2 36	6 50	5 39	11 16	11 36	6 48	5 40	11 14	6 40	5 48	11 7	10 36
21	Friday....	10 34 58	♏	6 51	5 38	morn	3 17	6 49	5 40	morn	ev 17	6 47	5 42	morn	6 39	5 49	morn	11 17
22	Saturday..	10 13 12	♐	6 49	5 39	0 24	4 1	6 47	5 41	0 21	1 1	6 46	5 43	0 19	6 38	5 50	0 9	ev 1
23	E	9 51 16	♐	6 48	5 40	1 28	4 48	6 46	5 42	1 24	1 48	6 44	5 44	1 21	6 37	5 51	1 8	0 48
24	Monday ...	9 29 11	♐	6 46	5 42	2 27	5 47	6 44	5 43	2 23	2 47	6 43	5 45	2 20	6 36	5 52	2 5	1 47
25	Tuesday ..	9 6 57	♑	6 45	5 43	3 22	7 3	6 43	5 45	3 18	4 3	6 41	5 46	3 14	6 35	5 52	2 58	3 3
26	Wednesday	8 44 36	♑	6 43	5 44	4 12	8 25	6 41	5 46	4 7	5 25	6 40	5 47	4 4	6 34	5 53	3 47	4 25
27	Thursday .	8 22 7	♒	6 42	5 45	4 56	9 43	6 40	5 47	4 52	6 43	6 38	5 48	4 48	6 33	5 54	4 33	5 43
28	Friday....	7 59 30	♒	6 40	5 46	5 35	10 38	6 38	5 48	5 31	7 38	6 37	5 49	5 28	6 31	5 55	5 14	6 38



BENEFIT OF CHOPPING HAY, &c.

A GREAT deal may be saved to every farmer by the use of a good straw-cutter. A physician, who keeps but one horse, assures us, that kept in the usual way, with hay and mill feed, the food cost *fifty dollars* a year—now, by a cutter, the cost is only *thirty*. What, then, would be the saving for twenty cows and five horses?

Does some one ask how this great saving is made? We answer: 1st. There is no waste by treading under foot; 2dly, the food is more easily fitted for mastication, and is quickly ground up, and digests more perfectly—a most important advantage; 3dly, animals eat readily a great deal of nutritious food otherwise rejected, as straw, coarse hay, and corn stalks, mixed together—thus nothing is allowed to waste; 4thly, working animals obtain their meals more quickly, and have more time to rest; 5thly, the chopped food may be seasoned with a little meal, and thus grain and hay all be taken together, which is found to be much better than to feed unmixed, unground, and unchopped materials.

"Cutting hay," says a late writer, "is like making mince meat." There is nearly the same nutriment in the tough pieces, and even gristle, as in the tender ones. Now chop these up fine, and properly cook and season them, and the dish is eaten with peculiar relish, easily digests, and goes twice as far as in the ordinary method of taking meat in slices."

ECONOMY OF TIME.

SCARCELY a farmer who is now reading these words, but who may think of some portion of the day, it may be only ten minutes, which he can devote to agricultural reading. Perhaps he spends already that much time in sitting idle, or in dipping into politics needlessly—could not a little improvement be made? And how much would the daily ten minutes be in a year? Five whole days, of ten hours each—for storing the mind with useful, profitable, and enduring facts. Now we have known more than one farmer to save frequently five, ten, or twenty dollars, by means of a single valuable idea, obtained through an agricultural paper. What a yearly loss, then, too many sustain, who throw these papers aside!

Every farmer should continue to give the best attention to his domestic animals. It is diligence only that can be crowned with success. The farmer must not trust too much to his help, but see for himself.

3d MONTH. MARCH, 1851. 31 Days.

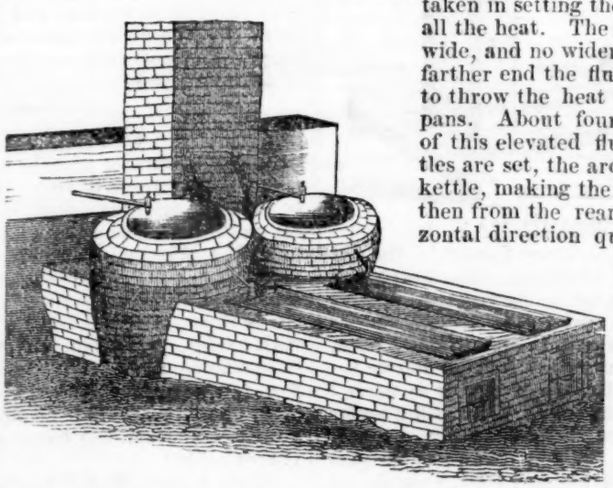
MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIMORE.	CHARLESTON.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
New Moon, ...	2 8 31 ev.	8 19 ev.	8 8 ev.	7 55 ev.	1 0 12 37
First Quarter,.	10 5 1 ev.	4 49 ev.	4 38 ev.	4 25 ev.	9 0 10 48
Full Moon,....	17 8 35 mo.	8 23 mo.	8 12 mo.	7 59 mo.	17 0 8 35
Third Quarter,	24 8 42 mo.	8 30 mo.	8 19 mo.	8 6 mo.	25 0 6 9

Finish all winter jobs before the driving work of spring comes on—get tools, implements, and every thing else in readiness for the business of the approaching season—see that plows, carts, harrows, rakes and other things are in good order and rigged for work.

Day of Month.	Day of Week.	Sun's declina'n S	Moon's Place.	CALENDAR For Boston, New-England New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.				CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
				Sun rises.	Sun sets.	Moon rises.	H. W. Bos'n.	Sun rises.	Sun sets.	Moon rises.	H. W. N.Y'k	Sun rises.	Sun sets.	Moon rises.		Sun rises.	Sun sets.	Moon rises.	H. W. Ch'ton
		° ′ ″		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.		H. M.	H. M.	H. M.	H. M.
1	Saturday..	7 36 46	♓	6 38	5 48	6 9	11 18	6 37	5 49	6 6	8 18	6 36	5 50	6 3		6 30	5 56	5 52	7 18
2	☾	7 13 56	♓	6 37	5 49	sets	11 54	6 35	5 50	sets	8 54	6 34	5 51	sets		6 29	5 56	sets	7 54
3	Monday ...	6 51 0	♈	6 35	5 50	6 30	morn	6 34	5 52	6 32	9 26	6 33	5 53	6 33		6 28	5 57	6 38	8 26
4	Tuesday ..	6 27 57	♈	6 33	5 51	7 28	0 26	6 32	5 53	7 29	9 56	6 31	5 54	7 30		6 27	5 58	7 32	8 56
5	Wednesday	6 4 50	♉	6 32	5 53	8 28	0 56	6 31	5 54	8 28	10 24	6 30	5 55	8 28		6 25	5 59	8 27	9 24
6	Thursday .	5 41 37	♉	6 30	5 54	9 28	1 24	6 29	5 55	9 27	10 55	6 28	5 56	9 26		6 24	5 59	9 22	9 55
7	Friday	5 18 21	♊	6 28	5 55	10 30	1 55	6 27	5 56	10 28	11 26	6 27	5 57	10 26		6 33	6 0	10 19	10 26
8	Saturday..	4 55 0	♊	6 27	5 56	11 32	2 26	6 26	5 57	11 29	11 57	6 25	5 58	11 27		6 22	6 1	11 17	10 57
9	☾	4 31 35	♋	6 25	5 57	morn	2 57	6 24	5 58	morn	morn	6 23	5 59	morn		6 20	6 2	morn	11 35
10	Monday ...	4 8 6	♋	6 23	5 59	0 36	3 35	6 23	5 59	0 32	0 35	6 22	6 0	0 30		6 19	6 3	0 16	morn
11	Tuesday ..	3 44 35	♌	6 22	6 0	1 39	4 18	6 21	6 0	1 35	1 18	6 20	6 1	1 32		6 18	6 3	1 17	0 18
12	Wednesday	3 21 1	♌	6 20	6 1	2 40	5 13	6 19	6 2	2 36	2 13	6 19	6 2	2 32		6 17	6 4	2 16	1 13
13	Thursday .	2 57 26	♍	6 18	6 2	3 37	6 32	6 18	6 3	3 32	3 32	6 17	6 3	3 29		6 15	6 5	3 14	2 32
14	Friday	2 33 47	♍	6 17	6 3	4 28	8 1	6 16	6 4	4 24	5 1	6 16	6 4	4 21		6 14	6 6	4 7	4 1
15	Saturday..	2 10 8	♎	6 15	6 4	5 13	9 24	6 14	6 5	5 10	6 24	6 14	6 5	5 7		6 13	6 6	4 57	5 24
16	☾	1 46 28	♎	6 13	6 6	5 53	10 27	6 13	6 6	5 51	7 27	6 12	6 6	5 49		6 11	6 7	5 42	6 27
17	Monday ...	1 22 47	♏	6 11	6 7	rises	11 17	6 11	6 7	rises	8 17	6 11	6 7	rises		6 10	6 8	rises	7 17
18	Tuesday ..	0 59 5	♏	6 10	6 8	7 43	ev 3	6 9	6 8	7 43	9 3	6 9	6 8	7 42		6 9	6 8	7 42	8 3
19	Wednesday	0 35 24	♐	6 8	6 9	8 56	0 47	6 8	6 9	8 55	9 47	6 8	6 9	8 54		6 7	6 9	8 49	8 47
20	Thursday .	S. 11 42	♐	6 6	6 10	10 7	1 28	6 6	6 10	10 4	10 28	6 6	6 10	10 2		6 6	6 10	9 53	9 28
21	Friday	N. 11 59	♑	6 4	6 11	11 14	2 9	6 4	6 11	11 11	11 9	6 5	6 11	11 8		6 5	6 11	10 56	10 9
22	Saturday..	0 35 39	♑	6 3	6 12	morn	2 49	6 3	6 12	morn	11 49	6 3	6 12	morn		6 3	6 11	11 56	10 49
23	☾	0 59 18	♒	6 1	6 14	0 18	3 29	6 1	6 13	0 13	ev 29	6 1	6 13	0 10		6 2	6 12	morn	11 29
24	Monday ...	1 22 55	♒	5 59	6 15	1 16	4 14	5 59	6 14	1 11	1 14	6 0	6 14	1 8		6 1	6 13	0 52	ev 14
25	Tuesday ..	1 46 30	♒	5 57	6 16	2 9	5 8	5 58	6 15	2 4	2 8	5 58	6 15	2 0		6 0	6 13	1 44	1 8
26	Wednesday	2 10 2	♓	5 56	6 17	2 55	6 25	5 56	6 16	2 50	3 25	5 57	6 16	2 47		5 58	6 14	2 31	2 25
27	Thursday .	2 33 33	♓	5 54	6 18	3 36	7 52	5 54	6 17	3 31	4 52	5 55	6 17	3 28		5 57	6 15	3 14	3 52
28	Friday....	2 57 0	♈	5 52	6 19	4 11	9 10	5 53	6 18	4 8	6 10	5 53	6 18	4 5		5 56	6 16	3 52	5 10
29	Saturday..	3 20 24	♈	5 50	6 20	4 43	10 10	5 51	6 20	4 40	7 10	5 52	6 19	4 38		5 54	6 16	4 28	6 10
30	☾	3 43 44	♉	5 49	6 21	5 12	10 51	5 49	6 21	5 10	7 51	5 50	6 20	5 8		5 53	6 17	5 1	6 51
31	Monday ..	4 7 0	♉	5 47	6 23	5 38	11 24	5 48	6 22	5 37	8 24	5 49	6 21	5 37		5 52	6 18	5 32	7 24

SUGAR BOILING APPARATUS.

THE accompanying cut represents an apparatus for holding and boiling the syrup, in making maple sugar. It is on a plan much approved in Vermont, by persons who make the best quality of this article. The arch of brick work is five feet six inches broad, and nine feet long to the back of the chimney. In front of this arch, as seen in the figure, are two sheet iron pans, each four feet long and twenty-one ins. wide. Directly in the rear of each of these pans, is a caldron, connected with the former by means of a tube and stop cock. In the rear of the whole is a large reservoir or trough, capable of holding nearly eight barrels, being connected with the kettles in the same manner as the kettles with the pans; and in the rear of this is another of the same dimensions, in both of which the sap is deposited. During the process of making sugar, a constant stream is kept running from the reservoir into the kettles, where the sap becomes heated, and is then passed into the pans by a constant stream, and is there reduced to a capacity for sugaring. The syrup is then removed and sugared in another department. Care should be taken in setting the pans and kettles, to save all the heat. The space under the pans is as wide, and no wider, than the bottom. At the farther end the flue rises six inches, in order to throw the heat against the bottom of the pans. About four inches above the bottom of this elevated flue, the bottoms of the kettles are set, the arch being headed up to the kettle, making the flue about ten inches deep; then from the rear, the flue passes in a horizontal direction quite round the kettle, and leads into the chimney. It will be found expedient to keep the flues separate, some five or six feet in the chimney.



Sugar made by the above process, is much superior to that made in the ordinary way, and is worth more in market. There are many farmers in Vermont who make one thousand pounds and upwards in a season, which readily sells at ten cents per pound by the quantity.

4th Month. APRIL, 1851. 30 Days.

MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIMORE.	CHARLESTON.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
New Moon, ...	1 1 49 ev.	1 37 ev.	1 26 ev.	1 13 ev.	1 0 4 1
First Quarter,	9 2 18 mo.	2 6 mo.	1 55 mo.	1 42 mo.	9 0 1 40
Full Moon, ...	15 5 51 ev.	5 39 ev.	5 28 ev.	5 15 ev.	17 morning.
Third Quarter,	23 2 14 mo.	2 2 mo.	1 51 mo.	1 38 mo.	25 11 57 54

Repair fences, lay up fallen rails; nail loose boards, and rebuild tumbling walls—clear, pick, roll, and plaster meadows, clearing off rubbish and stones, and thus save a week's work at the grindstone at mowing time—prepare ground for crops, draw out manure, etc., etc

Day of Month.	Day of Week.	Sun's declina'n S.	Moon's Place.	CALENDAR For Boston, New-England New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.			CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
				Sun rises.	Sun sets.	Moon sets.	H. W. Bost'n	Sun rises.	Sun sets.	Moon sets.	H. W. N.Y'k	Sun rises.	Sun sets.	Moon sets.	Sun rises.	Sun sets.	Moon sets.	H. W. Ch'ton
		° ′ ″		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	Tuesday ..	4 30 11	♈	5 45	6 24	sets	11 55	5 46	6 23	sets	8 55	5 47	6 22	sets	5 50	6 18	sets	7 55
2	Wednesday	4 53 18	♈	5 43	6 25	7 22	morn	5 45	6 24	7 21	9 25	5 45	6 23	7 20	5 49	6 19	7 17	8 25
3	Thursday .	5 16 19	♉	5 42	6 26	8 23	0 25	5 43	6 25	8 22	9 55	5 44	6 24	8 21	5 48	6 20	8 14	8 55
4	Friday	5 39 14	♉	5 40	6 27	9 26	0 55	5 41	6 26	9 24	10 27	5 42	6 25	9 22	5 46	6 20	9 12	9 27
5	Saturday..	6 2 4	♉	5 38	6 28	10 30	1 27	5 40	6 27	10 27	10 59	5 41	6 26	10 24	5 45	6 21	10 11	9 59
6	E	6 24 48	♉	5 37	6 29	11 33	1 59	5 38	6 28	11 29	11 34	5 39	6 27	11 26	5 44	6 22	11 11	10 34
7	Monday ...	6 47 24	♊	5 35	6 30	morn	2 34	5 36	6 29	morn	morn	5 38	6 28	morn	5 43	6 23	morn	11 12
8	Tuesday ..	7 9 55	♊	5 33	6 31	0 34	3 12	5 35	6 30	0 30	0 12	5 36	6 29	0 26	5 41	6 23	0 10	11 56
9	Wednesday	7 32 17	♋	5 32	6 33	1 31	3 56	5 33	6 31	1 26	0 56	5 35	6 30	1 23	5 40	6 24	1 7	morn
10	Thursday .	7 54 32	♋	5 30	6 34	2 22	4 57	5 32	6 32	2 18	1 57	5 33	6 31	2 15	5 39	6 25	2 0	0 57
11	Friday	8 16 38	♌	5 28	6 35	3 8	6 16	5 30	6 33	3 4	3 16	5 31	6 31	3 2	5 38	6 25	2 49	2 16
12	Saturday..	8 38 36	♌	5 27	6 36	3 48	7 47	5 29	6 34	3 46	4 47	5 30	6 32	3 44	5 36	6 26	3 34	3 47
13	E	9 0 27	♍	5 25	6 37	4 24	9 8	5 27	6 35	4 23	6 8	5 28	6 33	4 22	5 35	6 27	4 16	5 8
14	Monday ...	9 22 7	♍	5 23	6 38	4 57	10 9	5 25	6 36	4 57	7 9	5 27	6 34	4 57	5 34	6 27	4 55	6 9
15	Tuesday ..	9 43 38	♎	5 22	6 39	rises	10 57	5 24	6 37	rises	7 57	5 25	6 35	rises	5 33	6 28	rises	6 57
16	Wednesday	10 5 0	♎	5 20	6 40	7 43	11 39	5 22	6 38	7 41	8 39	5 24	6 36	7 40	5 31	6 29	7 33	7 39
17	Thursday .	10 26 11	♏	5 18	6 41	8 54	ev 23	5 21	6 39	8 51	9 23	5 23	6 37	8 48	5 30	6 30	8 38	8 23
18	Friday	10 47 12	♏	5 17	6 43	10 1	1 4	5 19	6 40	9 57	10 4	5 21	6 38	9 54	5 29	6 30	9 41	9 3
19	Saturday..	11 8 3	♐	5 15	6 44	11 4	1 43	5 18	6 41	10 59	10 43	5 20	6 39	10 56	5 28	6 31	10 40	9 43
20	E	11 28 43	♐	5 14	6 45	morn	2 22	5 16	6 42	11 56	11 22	5 18	6 40	11 52	5 27	6 32	11 36	10 22
21	Monday ...	11 49 12	♑	5 12	6 46	0 1	3 4	5 15	6 43	morn	ev 4	5 17	6 41	morn	5 26	6 32	morn	11 4
22	Tuesday ..	12 9 28	♑	5 11	6 47	0 51	3 46	5 13	6 44	0 46	0 46	5 15	6 42	0 42	5 24	6 33	0 26	11 46
23	Wednesday	12 29 34	♒	5 9	6 48	1 34	4 37	5 12	6 45	1 30	1 37	5 14	6 43	1 26	5 23	6 34	1 11	ev 37
24	Thursday .	12 49 27	♒	5 8	6 49	2 12	5 46	5 11	6 46	2 8	2 46	5 13	6 44	2 5	5 22	6 34	1 51	1 46
25	Friday	13 9 8	♓	5 6	6 50	2 45	7 8	5 9	6 47	2 42	4 8	5 11	6 45	2 39	5 21	6 35	2 28	3 8
26	Saturday..	13 28 35	♓	5 5	6 51	3 14	8 23	5 8	6 48	3 12	5 23	5 10	6 46	3 10	5 20	6 36	3 2	4 23
27	E	13 47 49	♓	5 3	6 53	3 42	9 28	5 6	6 49	3 40	6 28	5 9	6 47	3 39	5 19	6 37	3 34	5 28
28	Monday ...	14 6 51	♈	5 2	6 54	4 8	10 11	5 5	6 50	4 7	7 11	5 7	6 48	4 7	5 18	6 37	4 4	6 11
29	Tuesday ..	14 25 38	♈	5 0	6 55	4 35	10 48	5 4	6 52	4 35	7 48	5 6	6 49	4 35	5 17	6 38	4 35	6 48
30	Wednesday	14 44 11	♉	4 59	6 56	5 0	11 23	5 2	6 53	5 2	8 23	5 5	6 50	5 3	5 16	6 39	5 7	7 23

SEED SOWERS OR DRILLS.

Among the labor-saving implements which have been introduced into agricultural operations, few are more valuable than seed-sowers. Those which are properly constructed, deposit the seed more perfectly than it is usually done by hand, while at the same time the work is performed five times, and in some instances ten times more rapidly than it can be by the former mode.

The accompanying cut represents "Emery's seed-drill and corn-planter," which is one of the best machines for this purpose that we have seen. It is calculated for sowing all kinds of seeds, from onion and turnep seed to Indian corn. By changing the apparatus for dropping the seed, it can be deposited at distances varying from three inches to six feet. It may be used by hand, or by being made of larger size and greater strength, may be drawn by a horse. For gardening purposes it is commonly operated by hand, and for field operations by horse-power. It is in great requisition for planting broomcorn and beans, and is used to a great extent in planting Indian corn. Some of the heaviest crops of the latter which have been raised in this State for the last two or three years, have been planted by this machine. A man and boy, with a horse, can plant from twelve to fifteen acres in a day. The amount which can be planted in a given time, depends on the width of the rows. The statement in regard to the amount of corn planted in a day, is on the supposition that the rows are three and a half feet apart.

The depth of planting can be regulated at will, by raising or lowering the plow which makes the furrow. For small seeds, a depth of an inch is sufficient. For corn and beans, two inches is the usual depth. Crops planted with this machine, from the regularity of the rows, are cultivated with much ease and at little expense.

INTERESTING EXPERIMENTS.

Adam Clark, of Milo, N. Y., gives the result of an experiment, which is worthy the attention of all wheat raisers. Four pieces of ground, each two feet square, of finely prepared ground, were planted with wheat, a grain each at the intersection of straight lines drawn across each plat. The experiment and results we have condensed in the following table:

	No. 1.	No. 2.	No. 3.	No. 4.
Distances of seed asunder	1½ in.	3 in.	4 in.	4 4-5 in.
Number of grains planted,....	289	81	49	36
Number of grains that grew,.	203	60	40	30
Number of heads,.....	286	136	112	104
Whole number of grains, ...	7458	4765	4452	4399
Yield per acre in bushels, ...	108	69	64	63
Seed per acre in bush. & lbs.	4 bu. 12 lbs.	1 bu. 10 lbs.	42¾ lbs	31½ lbs

5th MONTH. **MAY, 1851.** **31 Days.**

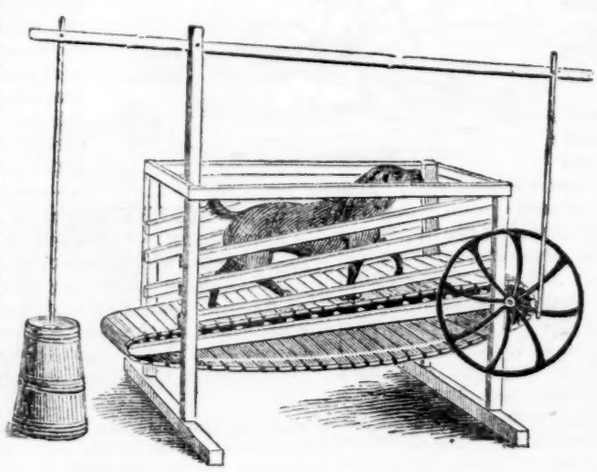
MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIMORE.	CHARLESTON.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
New Moon, ...	1 4 18 mo.	4 6 mo.	3 55 mo.	3 42 mo.	1 11 56 59
First Quarter,.	8 8 50 mo.	8 38 mo.	8 27 mo.	8 14 mo.	9 11 56 16
Full Moon,....	15 3 21 mo.	3 9 mo.	2 58 mo.	2 45 mo.	17 11 56 8
Third Quarter,	22 8 21 ev.	8 9 ev.	7 58 ev.	7 45 ev.	25 11 56 36
New Moon, ...	30 4 3 ev.	3 51 ev.	3 40 ev.	3 27 ev.	.....

Make vigorous preparations to put in crops. Let them be planted in the best manner—an additional half day in doing work well, may secure an additional wagon load of products. Thorough work is economy. Plant corn early—more is lost from late than early planting. Plant in straight rows.

Day of Month.	Day of Week.	Sun's declina'n N	Moon's Place.	CALENDAR For Boston, New-England New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.			CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
				Sun rises.	Sun sets.	Moon sets.	H. W. Bos'n.	Sun rises.	Sun sets.	Moon sets.	H. W. N.Y'k	Sun rises.	Sun sets.	Moon sets.	Sun rises.	Sun sets.	Moon sets.	H. W. Ch'ton
		° ′ ″		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	Thursday .	15 2 30	♌	4 58	6 57	sets	11 54	5 1	6 54	sets	8 54	5 4	6 51	sets	5 15	6 40	sets	7 54
2	Friday	15 20 33	♌	4 56	6 58	8 22	morn	5 0	6 55	8 19	9 29	5 2	6 52	8 16	5 14	6 40	8 5	8 29
3	Saturday..	15 38 22	♍	4 55	6 59	9 27	0 29	4 59	6 56	9 23	10 1	5 1	6 53	9 20	5 13	6 41	9 6	9 1
4	E	15 55 55	♍	4 54	7 0	10 30	1 1	4 57	6 57	10 25	10 37	5 0	6 54	10 22	5 12	6 42	10 6	9 37
5	Monday ...	16 13 12	♎	4 52	7 1	11 28	1 37	4 56	6 58	11 24	11 14	4 59	6 55	11 20	5 11	6 42	11 4	10 14
6	Tuesday ..	16 30 12	♎	4 51	7 2	morn	2 14	4 55	6 59	morn	11 57	4 58	6 56	morn	5 10	6 43	11 58	10 57
7	Wednesday	16 46 57	♏	4 50	7 3	0 21	2 57	4 54	7 0	0 17	morn	4 57	6 57	0 14	5 9	6 44	morn	11 47
8	Thursday .	17 3 25	♏	4 49	7 5	1 8	3 47	4 53	7 1	1 4	0 47	4 56	6 58	1 1	5 8	6 45	0 48	morn
9	Friday	17 19 36	♐	4 48	7 6	1 48	4 49	4 51	7 2	1 46	1 49	4 54	6 59	1 43	5 8	6 45	1 33	0 49
10	Saturday..	17 35 29	♐	4 46	7 7	2 24	6 8	4 50	7 3	2 23	3 8	4 53	6 59	2 21	5 7	6 46	2 14	2 8
11	E	17 51 5	♑	4 45	7 8	2 57	7 30	4 49	7 4	2 57	4 30	4 52	7 0	2 56	5 6	6 47	2 53	3 30
12	Monday ...	18 6 22	♑	4 44	7 9	3 29	8 45	4 48	7 5	3 29	5 45	4 51	7 1	3 30	5 5	6 47	3 30	4 45
13	Tuesday ..	18 21 21	♒	4 43	7 10	4 0	9 42	4 47	7 6	4 1	6 42	4 50	7 2	4 3	5 4	6 48	4 7	5 42
14	Wednesday	18 36 1	♒	4 42	7 11	4 32	10 31	4 46	7 6	4 35	7 31	4 49	7 3	4 37	5 4	6 49	4 45	6 31
15	Thursday .	18 50 24	♓	4 41	7 12	rises	11 17	4 45	7 7	rises	8 17	4 49	7 4	rises	5 3	6 50	rises	7 17
16	Friday	19 4 27	♓	4 40	7 13	8 48	ev 2	4 44	7 8	8 43	9 2	4 48	7 5	8 40	5 2	6 50	8 25	8 2
17	Saturday..	19 18 11	♈	4 39	7 14	9 48	0 41	4 43	7 9	9 44	9 41	4 47	7 6	9 40	5 2	6 51	9 24	8 41
18	E	19 31 35	♈	4 38	7 15	10 43	1 21	4 43	7 10	10 38	10 21	4 46	7 7	10 34	5 1	6 52	10 17	9 21
19	Monday ...	19 44 39	♉	4 37	7 16	11 30	2 1	4 42	7 11	11 25	11 1	4 45	7 8	11 22	5 0	6 52	11 5	10 1
20	Tuesday ..	19 57 23	♉	4 36	7 17	morn	2 41	4 41	7 12	morn	11 41	4 44	7 9	morn	5 0	6 53	11 49	10 41
21	Wednesday	20 9 47	♊	4 35	7 18	0 11	3 22	4 40	7 13	0 6	ev 22	4 44	7 9	0 3	4 59	6 54	morn	11 22
22	Thursday .	20 21 50	♊	4 34	7 19	0 46	4 12	4 39	7 14	0 42	1 12	4 43	7 10	0 39	4 59	6 54	0 27	ev 12
23	Friday	20 33 33	♋	4 34	7 20	1 17	5 6	4 38	7 15	1 14	2 6	4 42	7 11	1 12	4 58	6 55	1 2	1 6
24	Saturday..	20 44 54	♋	4 33	7 21	1 44	6 14	4 38	7 16	1 43	3 14	4 41	7 12	1 41	4 58	6 56	1 34	2 14
25	E	20 55 55	♌	4 32	7 22	2 10	7 26	4 37	7 17	2 10	4 26	4 41	7 13	2 9	4 57	6 56	2 5	3 26
26	Monday ...	21 6 34	♌	4 31	7 22	2 36	8 27	4 36	7 17	2 36	5 27	4 40	7 14	2 36	4 57	6 57	2 35	4 27
27	Tuesday ..	21 16 50	♌	4 31	7 23	3 2	9 23	4 36	7 18	3 3	6 23	4 40	7 14	3 4	4 56	6 58	3 7	5 23
28	Wednesday	21 26 45	♍	4 30	7 24	3 29	10 6	4 35	7 19	3 31	7 6	4 39	7 15	3 33	4 56	6 58	3 39	6 6
29	Thursday .	21 36 18	♍	4 29	7 25	4 0	10 45	4 35	7 20	4 3	7 45	4 39	7 16	4 6	4 55	6 59	4 15	6 45
30	Friday	21 45 28	♎	4 29	7 26	sets	11 23	4 34	7 21	sets	8 23	4 38	7 17	sets	4 55	6 59	sets	7 23
31	Saturday..	21 54 17	♎	4 28	7 27	8 20	morn	4 34	7 21	8 16	9 3	4 38	7 17	8 12	4 55	7 0	7 57	8 3

DOG-POWER.

In small dairies, a dog-power for driving the churn, has been found very convenient. It may also be used for turning grindstones. The accompanying figure represents one of the best improved now in use. It is an endless platform formed upon two India rubber straps, connected by rivets to light cross pieces of wood. It is easily graduated to the weight of the dog, by raising or lowering one end of the platform. Some prefer sheep to dogs for this purpose. The machine is sold at the agricultural warehouses, for $12.50.



For large dairies, a single horse-power will be found most efficient. Such a power may be used for other purposes. An ingenious farmer in western New-York has constructed a two-horse-power with his own hands, without cog-wheels, but merely with band-wheels, which churns, turns grindstone, saws wood, slits pickets for fence, and threshes grain; and it might easily be applied to driving a washing machine. Why should the economical farmer have such work done by human beings, when the same amount of horse-strength can be had for a tenth of the cost? Besides which, every farmer has an idle horse at some time during each week.

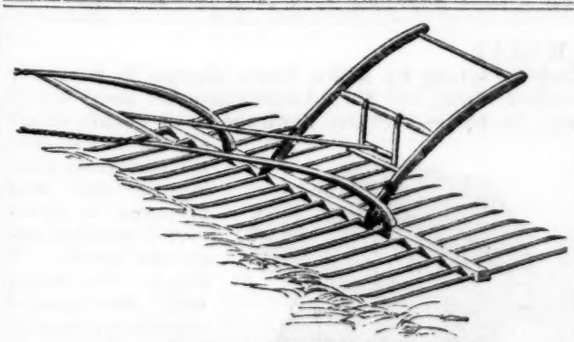
HARROWING WHEAT IN SPRING.—Myron Adams, of East Bloomfield, N.Y., has for many years harrowed over the whole of his wheat fields every spring, pulverizing the crust and greatly benefiting the crop. If the ground is to be seeded with clover, it is harrowed in at this time. The whole amount torn up by the roots has been found by examination not to exceed the amount of a bushel on ten acres. The wheat looks rather unpromising when thus dusted over with earth, but the first shower washes it off and leaves it vigorous.

6th Month. **JUNE, 1851.** **30 Days.**

MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIMORE.	CHARLESTON	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
First Quarter,.	6 1 44 ev.	1 32 ev.	1 21 ev.	1 8 ev.	1 11 57 27
Full Moon,....	13 2 0 ev.	1 48 ev.	1 37 ev.	1 24 ev.	9 11 58 50
Third Quarter,	21 1 51 ev.	1 39 ev.	1 28 ev.	1 15 ev.	17 ev. 0 28
New Moon, ...	29 1 41 mo.	1 29 mo.	1 18 mo.	1 5 mo.	25 0 2 11

The crops for the season being now mostly planted, see that weeds do not devour them. "A stitch in time saves nine," whether applied to pantaloons or to potatoes. Sow corn for fodder. Sow ruta bagas, from 1st to 16th, in clean, rich soil. Destroy the curculio on young fruit.

Day of Month.	Day of Week.	Sun's declina'n N.	Moon's Place.	CALENDAR For Boston, New-England New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.				CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
				Sun rises.	Sun sets.	Moon sets.	H. W. Bost'n	Sun rises.	Sun sets.	Moon sets.	H. W. N.Y'k	Sun rises.	Sun sets.	Moon sets.		Sun rises.	Sun sets.	Moon sets.	H. W. Ch'ton
		° ′ ″		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.		H. M.	H. M.	H. M.	H. M.
1	E	22 2 41	♋	4 28	7 27	9 22	0 3	4 33	7 22	9 17	9 40	4 37	7 18	9 14		4 54	7 1	8 57	8 40
2	Monday ..	22 10 43	♋	4 27	7 28	10 18	0 40	4 33	7 23	10 14	10 21	4 37	7 19	10 10		4 54	7 1	9 54	9 21
3	Tuesday ..	22 18 22	♌	4 27	7 29	11 8	1 21	4 32	7 23	11 4	11 4	4 36	7 19	11 1		4 54	7 2	10 47	10 4
4	Wednesday	22 25 38	♌	4 27	7 29	11 51	2 4	4 32	7 24	11 48	11 49	4 36	7 20	11 45		4 54	7 2	11 33	10 49
5	Thursday .	22 32 30	♍	4 26	7 30	morn	2 49	4 32	7 25	morn	morn	4 36	7 21	morn		4 53	7 3	morn	11 45
6	Friday....	22 38 58	♍	4 26	7 31	0 28	3 45	4 31	7 25	0 26	0 45	4 35	7 21	0 24		4 53	7 3	0 16	morn
7	Saturday..	22 45 2	♎	4 26	7 31	1 1	4 44	4 31	7 26	1 0	1 44	4 35	7 22	0 59		4 53	7 4	0 54	0 44
8	E	22 50 42	♎	4 25	7 32	1 32	5 54	4 31	7 27	1 32	2 54	4 35	7 22	1 32		4 53	7 4	1 31	1 54
9	Monday ...	22 55 58	♏	4 25	7 33	2 2	7 7	4 31	7 27	2 3	4 7	4 35	7 23	2 4		4 53	7 5	2 7	3 7
10	Tuesday ..	23 0 50	♏	4 25	7 33	2 33	8 14	4 30	7 28	2 35	5 14	4 35	7 24	2 37		4 53	7 5	2 43	4 14
11	Wednesday	23 5 18	♐	4 25	7 34	3 5	9 16	4 30	7 28	3 9	6 16	4 34	7 24	3 12		4 53	7 6	3 21	5 16
12	Thursday .	23 9 22	♐	4 24	7 34	3 41	10 10	4 30	7 29	3 46	7 10	4 34	7 25	3 49		4 53	7 6	4 2	6 10
13	Friday....	23 13 0	♑	4 24	7 35	rises	10 59	4 30	7 29	rises	7 59	4 34	7 25	rises		4 53	7 6	rises	6 59
14	Saturday..	23 16 15	♑	4 24	7 35	8 33	11 43	4 30	7 30	8 28	8 43	4 34	7 26	8 24		4 53	7 7	8 7	7 43
15	E	23 19 5	♒	4 24	7 36	9 23	ev 26	4 30	7 30	9 19	9 26	4 34	7 26	9 15		4 53	7 7	8 58	8 26
16	Monday ...	23 21 30	♒	4 24	7 36	10 7	1 5	4 30	7 31	10 3	10 5	4 34	7 26	9 59		4 53	7 7	9 44	9 5
17	Tuesday ..	23 23 30	♓	4 24	7 36	10 45	1 43	4 30	7 31	10 41	10 43	4 34	7 27	10 38		4 53	7 8	10 24	9 43
18	Wednesday	23 25 6	♓	4 24	7 37	11 18	2 22	4 30	7 31	11 14	11 22	4 34	7 27	11 12		4 53	7 8	11 1	10 22
19	Thursday .	23 26 17	♈	4 25	7 37	11 47	3 1	4 30	7 31	11 44	ev 1	4 35	7 27	11 43		4 53	7 8	11 34	11 1
20	Friday....	23 27 3	♈	4 25	7 37	morn	3 43	4 30	7 32	morn	0 43	4 35	7 27	morn		4 53	7 9	morn	11 43
21	Saturday..	23 27 24	♉	4 25	7 38	0 13	4 28	4 31	7 32	0 12	1 28	4 35	7 28	0 11		4 54	7 9	0 5	ev 28
22	E	23 27 21	♉	4 25	7 38	0 38	5 20	4 31	7 32	0 38	2 20	4 35	7 28	0 38		4 54	7 9	0 36	1 20
23	Monday ...	23 26 52	♊	4 25	7 38	1 3	6 23	4 31	7 32	1 4	3 23	4 35	7 28	1 5		4 54	7 9	1 6	2 23
24	Tuesday ..	23 26 0	♊	4 26	7 38	1 30	7 24	4 31	7 32	1 31	4 24	4 36	7 28	1 33		4 54	7 9	1 37	3 24
25	Wednesday	23 24 42	♋	4 26	7 38	1 58	8 23	4 32	7 33	2 1	5 23	4 36	7 28	2 3		4 55	7 10	2 11	4 23
26	Thursday .	23 23 0	♋	4 26	7 38	2 31	9 22	4 32	7 33	2 34	6 22	4 36	7 28	2 38		4 55	7 10	2 49	5 22
27	Friday....	23 20 53	♋	4 27	7 38	3 9	10 11	4 32	7 33	3 13	7 11	4 36	7 28	3 17		4 55	7 10	3 31	6 11
28	Saturday..	23 18 21	♋	4 27	7 38	3 54	10 55	4 33	7 33	3 59	7 55	4 37	7 28	4 4		4 56	7 10	4 20	6 55
29	E	23 15 25	♌	4 27	7 38	sets	11 40	4 33	7 33	sets	8 40	4 37	7 28	sets		4 56	7 10	sets	7 40
30	Monday ...	23 12 4	♌	4 28	7 38	9 2	morn	4 33	7 33	8 58	9 26	4 38	7 28	8 55		4 56	7 10	8 40	8 26



THE HORSE RAKE.

MANY farmers are still unsupplied with horse-rakes. Those who have tried them would almost as soon think of doing without a plow, and dig by hand. We lately saw four strong men on a fine meadow of dried hay, working might and main with hand rakes, to save it from the onward-marching thunder storm. One of them, with a good revolver, would have collected the hay thrice as fast as the four, and probably have saved many dollars loss in spoiled hay and hard work. Twenty-four acres may be raked by one horse in a day.

The revolver is best for hay; the spring-toothed for gleaning. The latter will also work best on rough or stony ground, and either are fine for gleaning meadows, and will save much hand-labor after the pitch fork. The spring-tooth rake is a great labor-saver in pulling and gathering peas.

GRAIN BINDERS' WHEEL-RAKE.

THIS is a labor-saving implement, used extensively in several States. It is light, weighing about 15 lbs. The binder takes the handles and pushes it before him, with the points of the teeth or fingers close upon the ground, and when he has gathered a sufficient quantity for binding into a sheaf, he

places his foot upon the foot-piece, (*a*) and by a slight pressure, and letting go the handles, the fingers and grain are raised above the stubble, when it is readily bound, the binder being required to stoop much less than in the old way of reaching to the ground. When the sheaf is bound and thrown aside, the foot is removed from the foot-piece, the teeth drop down, and the handles rise ready for the next operation.

7th MONTH. JULY, 1851. 31 Days.

MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIMORE.	CHARLESTON.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
First Quarter,.	5 6 24 ev.	6 14 ev.	6 1 ev.	5 48 ev.	1 0 3 25
Full Moon, ...	13 2 30 mo.	2 18 mo.	2 7 mo.	1 54 mo.	9 0 4 49
Third Quarter,	21 5 55 mo.	5 43 mo.	5 32 mo.	5 19 mo.	17 0 5 46
New Moon, ...	28 9 56 mo.	9 44 mo.	9 33 mo.	9 20 mo.	25 0 6 11

Look well to weeds. Would you avoid an invading army of robbers? Then destroy weeds on their first approach; for they devour more of the riches of the soil and of the weight of the crop, every year in the country, than would feed the army of Napoleon.

Day of Month.	Day of Week.	Sun's declina'n N.	Moon's Place.	CALENDAR For Boston, New-England New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.			CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
				Sun rises.	Sun sets.	Moon sets.	H. W. Bos'n.	Sun rises.	Sun sets.	Moon sets.	H. W. N.Y'k	Sun rises.	Sun sets.	Moon sets.	Sun rises.	Sun sets.	Moon sets.	H. W. Ch'ton
		° ′ ″		H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H.M.	H.M.	H. M.	H. M.
1	Tuesday ..	23 8 19	♌	4 28	7 38	9 49	0 26	4 34	7 33	9 46	10 11	4 38	7 28	9 43	4 57	7 10	9 30	9 11
2	Wednesday	23 4 10	♍	4 29	7 38	10 29	1 11	4 34	7 33	10 27	10 56	4 39	7 28	10 25	4 57	7 10	10 15	9 56
3	Thursday .	22 59 36	♍	4 29	7 38	11 4	1 56	4 35	7 32	11 2	11 44	4 39	7 28	11 1	4 58	7 10	10 56	10 44
4	Friday	22 54 39	♎	4 30	7 38	11 36	2 44	4 35	7 32	11 36	morn	4 40	7 28	11 35	4 58	7 10	11 33	11 36
5	Saturday..	22 49 17	♎	4 31	7 37	morn	3 36	4 36	7 32	morn	0 36	4 40	7 28	morn	4 58	7 10	morn	morn
6	**E**	22 43 31	♏	4 31	7 37	0 6	4 32	4 37	7 32	0 7	1 32	4 41	7 28	0 8	4 59	7 9	0 9	0 32
7	Monday ...	22 37 22	♏	4 32	7 37	0 36	5 33	4 37	7 31	0 38	2 33	4 41	7 27	0 40	4 59	7 9	0 45	1 33
8	Tuesday ..	22 30 49	♐	4 32	7 37	1 8	6 39	4 38	7 31	1 11	3 39	4 42	7 27	1 13	5 0	7 9	1 22	2 39
9	Wednesday	22 23 54	♐	4 33	7 36	1 42	7 44	4 38	7 31	1 46	4 44	4 43	7 27	1 49	5 0	7 9	2 1	3 44
10	Thursday .	22 16 35	♐	4 34	7 36	2 20	8 51	4 39	7 30	2 25	5 51	4 43	7 26	2 29	5 1	7 9	2 43	4 51
11	Friday	22 8 52	♑	4 34	7 35	3 2	9 50	4 40	7 30	3 8	6 50	4 44	7 26	3 12	5 1	7 8	3 29	5 50
12	Saturday..	22 0 47	♑	4 35	7 35	3 50	10 42	4 40	7 29	3 56	7 42	4 44	7 26	4 1	5 2	7 8	4 19	6 42
13	**E**	21 52 20	♒	4 36	7 34	rises	11 30	4 41	7 29	rises	8 30	4 45	7 25	rises	5 2	7 8	rises	7 30
14	Monday ...	21 43 30	♒	4 37	7 34	8 43	ev 12	4 42	7 28	8 39	9 12	4 46	7 25	8 36	5 3	7 7	8 22	8 12
15	Tuesday ..	21 34 18	♓	4 38	7 33	9 18	0 51	4 43	7 28	9 14	9 51	4 47	7 24	9 12	5 4	7 7	9 0	8 51
16	Wednesday	21 24 43	♓	4 38	7 32	9 48	1 26	4 43	7 27	9 46	10 26	4 47	7 24	9 44	5 4	7 7	9 34	9 26
17	Thursday .	21 14 47	♓	4 39	7 32	10 16	2 1	4 44	7 27	10 14	11 1	4 48	7 23	10 13	5 5	7 6	10 6	10 1
18	Friday	21 4 28	♈	4 40	7 31	10 41	2 36	4 45	7 26	10 40	11 36	4 49	7 22	10 40	5 5	7 6	10 36	10 36
19	Saturday..	20 53 50	♈	4 41	7 30	11 6	3 13	4 46	7 25	11 6	ev 13	4 50	7 22	11 6	5 6	7 5	11 6	11 13
20	**E**	20 42 48	♉	4 42	7 30	11 31	3 50	4 47	7 25	11 32	0 50	4 50	7 21	11 33	5 7	7 5	11 36	11 50
21	Monday ...	20 31 27	♉	4 43	7 29	11 58	4 33	4 48	7 24	12 0	1 33	4 51	7 20	morn	5 7	7 4	morn	ev 33
22	Tuesday ..	20 19 45	♉	4 44	7 28	morn	5 22	4 48	7 23	morn	2 22	4 52	7 20	0 2	5 8	7 4	0 8	1 22
23	Wednesday	20 7 43	♊	4 44	7 27	0 28	6 25	4 49	7 22	0 31	3 25	4 53	7 19	0 34	5 9	7 3	0 43	2 25
24	Thursday .	19 55 20	♊	4 45	7 26	1 2	7 30	4 50	7 22	1 6	4 30	4 54	7 18	1 10	5 9	7 3	1 23	3 30
25	Friday	19 42 36	♋	4 46	7 25	1 43	8 36	4 51	7 21	1 48	5 36	4 55	7 17	1 52	5 10	7 2	2 8	4 36
26	Saturday..	19 29 35	♋	4 47	7 24	2 32	9 40	4 52	7 20	2 38	6 40	4 55	7 16	2 43	5 11	7 1	3 0	5 40
27	**E**	19 16 12	♋	4 48	7 23	3 31	10 33	4 53	7 19	3 36	7 33	4 56	7 16	3 41	5 11	7 1	3 59	6 33
28	Monday ...	19 2 31	♌	4 49	7 22	sets	11 25	4 54	7 18	sets	8 25	4 57	7 15	sets	5 12	7 0	sets	7 25
29	Tuesday ..	18 48 31	♌	4 50	7 21	8 24	morn	4 55	7 17	8 21	9 13	4 58	7 14	8 19	5 13	6 59	8 8	8 13
30	Wednesday	18 34 12	♍	4 51	7 20	9 3	0 13	4 56	7 16	9 1	9 59	4 59	7 13	8 59	5 13	6 59	8 52	8 59
31	Thursday .	18 19 35	♍	4 52	7 19	9 37	0 59	4 56	7 15	9 36	10 43	5 0	7 12	9 36	5 14	6 58	9 32	9 43

SHOCKS OF WHEAT.

Many hundred thousand bushels of wheat were lost in 1850, by the continued rains at harvest. A large portion might have been saved, if all had been well put up as soon as cut, into water-proof shocks.

Another reason for putting up shocks secure from rain, is the fact, now thoroughly established, that wheat cut a full week before it is dead ripe, actually weighs more (as the writer has carefully tried) than dead-ripe grain, besides furnishing less bran, better straw, and shelling less in the field. It also allows the farmer more time. Now, when cut partly green, it must stand a few days to mature, before drawn into the barn.

Fig. 1.

Various sorts of water-proof shocks have been tried. The common mode of setting the sheaves in simple double rows, affords no protection from long and heavy rains. Covering these with two nearly horizontal sheaves, with heads meeting in the middle, as often done, is not much better. A very good way is represented in the annexed figure, (fig. 1.) This shock is made by setting up half a dozen sheaves in a round, compact form, and then binding another sheaf firmly near the butts—breaking down the straw equally on all sides from the centre, and finally placing the cap, thus prepared, in an inverted position upon the shock. A shock, thus made, with the sheaves compactly, evenly, and neatly placed, will withstand perfectly a week's rain. A more rapid mode, and nearly or quite as good, is shown by fig. 2, and consists, first, of the six round, compact sheaves, which are then covered with two others, broken at the middle and laid on in the form of a cross, spreading out the ends so as to form a perfect shield from storms.

Fig. 2.

Many of our readers may have already tried these modes of securing wheat, but others, in some parts of the country, have not known them, and it is for the benefit of the latter that we have pointed them out.

Money.—If you would know the value of money, go and try to borrow some.

8th Month. **AUGUST, 1851.** **31 Days.**

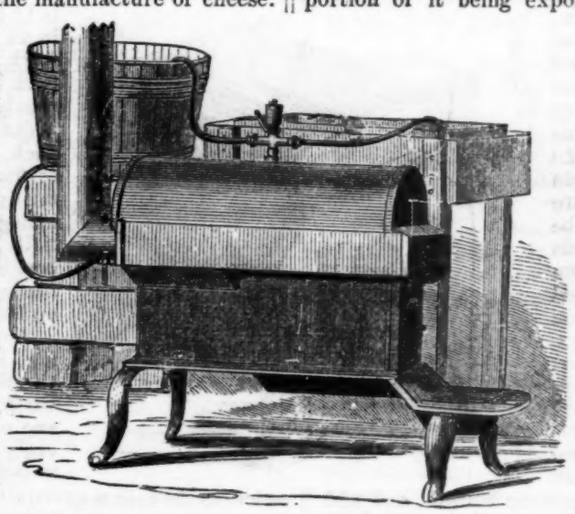
MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIMORE.	CHARLESTON.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
New Moon, ...	4 0 23 mo.	0 11 mo.	12 0 ev.	11 47 ev.	1 0 6 3
First Quarter,.	11 4 59 ev.	4 47 ev.	4 36 ev.	4 23 ev.	9 0 5 16
Full Moon,....	19 8 14 ev.	8 2 ev.	7 51 ev.	7 38 ev.	17 0 53 5
Third Quarter,	26 5 36 ev.	5 24 ev.	5 13 ev.	5 0 ev.	25 0 1 56

Take great pains to procure the cleanest seed wheat, carefully avoiding the seeds of cockle and chess. Corn sown for fodder should be cut as soon as the leaves first turn brown—dry it thoroughly, salt it well, and ventilate the centre of the stack with rails, set upright.

Day of Month.	Day of Week.	Moon's Place.	Sun's declina'n N.	CALENDAR For Boston, New-England New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.			CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
				Sun rises.	Sun sets.	Moon sets.	H. W. Bost'n	Sun rises.	Sun sets.	Moon sets.	H. W N.Y'k	Sun rises.	Sun sets.	Moon sets.	Sun rises.	Sun sets.	Moon sets.	H. W. Ch'ton
			° ′ ″	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	Friday....	♎	18 4 41	4 53	7 18	10 9	1 43	4 57	7 14	10 9	11 31	5 1	7 11	10 9	5 15	6 57	10 9	10 31
2	Saturday..	♏	17 49 27	4 54	7 17	10 39	2 31	4 58	7 13	10 41	morn	5 1	7 10	10 42	5 15	6 56	10 46	11 18
3	E	♏	17 33 57	4 55	7 16	11 10	3 18	4 59	7 12	11 13	0 18	5 2	7 9	11 14	5 16	6 55	11 23	morn
4	Monday ...	♐	17 18 10	4 56	7 15	11 44	4 9	5 0	7 11	11 47	1 9	5 3	7 8	11 49	5 17	6 55	morn	0 9
5	Tuesday ..	♐	17 2 6	4 57	7 13	morn	5 1	5 1	7 10	morn	2 1	5 4	7 7	morn	5 17	6 54	0 1	1 1
6	Wednesday	♐	16 45 45	4 58	7 12	0 20	6 0	5 2	7 8	0 25	3 0	5 5	7 6	0 27	5 18	6 53	0 42	2 0
7	Thursday .	♑	16 29 9	4 59	7 11	1 1	7 13	5 3	7 7	1 6	4 13	5 6	7 4	1 9	5 19	6 52	1 27	3 13
8	Friday....	♑	16 12 16	5 0	7 10	1 47	8 27	5 4	7 6	1 53	5 27	5 7	7 3	1 55	5 19	6 51	2 15	4 27
9	Saturday..	♒	15 55 8	5 1	7 8	2 38	9 39	5 5	7 5	2 44	6 39	5 8	7 2	2 46	5 20	6 50	3 6	5 39
10	E	♒	15 37 44	5 2	7 7	3 32	10 34	5 6	7 4	3 38	7 34	5 9	7 1	3 41	5 21	6 49	4 0	6 34
11	Monday ...	♒	15 20 6	5 3	7 6	rises	11 20	5 7	7 2	rises	8 20	5 10	7 0	rises	5 21	6 48	rises	7 20
12	Tuesday ..	♓	15 2 12	5 4	7 4	7 50	11 57	5 8	7 1	7 47	8 57	5 11	6 58	7 46	5 22	6 47	7 35	7 57
13	Wednesday	♓	14 44 5	5 6	7 3	8 18	ev 34	5 9	7 0	8 16	9 34	5 12	6 57	8 16	5 23	6 46	8 7	8 34
14	Thursday .	♈	14 25 43	5 7	7 2	8 44	1 7	5 10	6 58	8 43	10 7	5 12	6 56	8 43	5 23	6 45	8 38	9 7
15	Friday....	♈	14 7 8	5 8	7 0	9 9	1 36	5 11	6 57	9 9	10 36	5 13	6 55	9 9	5 24	6 44	9 8	9 36
16	Saturday..	♉	13 48 19	5 9	6 59	9 34	2 9	5 12	6 56	9 35	11 9	5 14	6 53	9 35	5 25	6 43	9 37	10 9
17	E	♉	13 29 16	5 10	6 57	9 59	2 41	5 13	6 54	10 1	11 41	5 15	6 52	10 2	5 25	6 42	10 8	10 41
18	Monday ...	♊	13 10 2	5 11	6 56	10 27	3 13	5 14	6 53	10 30	ev 13	5 16	6 51	10 32	5 26	6 41	10 41	11 13
19	Tuesday ..	♊	12 50 33	5 12	6 54	10 59	3 52	5 15	6 51	11 3	0 52	5 17	6 49	11 5	5 27	6 40	11 17	11 52
20	Wednesday	♋	12 30 53	5 13	6 53	11 36	4 33	5 16	6 50	11 41	1 33	5 18	6 48	11 43	5 27	6 39	11 59	ev 33
21	Thursday .	♋	12 11 1	5 14	6 51	morn	5 28	5 17	6 48	morn	2 28	5 19	6 46	morn	5 28	6 37	morn	1 28
22	Friday....	♌	11 50 56	5 15	6 50	0 19	6 42	5 18	6 47	0 25	3 42	5 20	6 45	0 27	5 29	6 36	0 46	2 42
23	Saturday..	♌	11 30 42	5 16	6 48	1 12	8 0	5 19	6 46	1 18	5 0	5 21	6 44	1 21	5 29	6 35	1 40	4 0
24	E	♌	11 10 16	5 17	6 47	2 14	9 16	5 20	6 44	2 20	6 16	5 22	6 42	2 22	5 30	6 34	2 42	5 16
25	Monday ...	♍	10 49 39	5 18	6 45	3 24	10 15	5 21	6 43	3 29	7 15	5 23	6 41	3 31	5 31	6 33	3 49	6 15
26	Tuesday ..	♍	10 28 52	5 19	6 43	sets	11 10	5 22	6 41	sets	8 10	5 24	6 39	sets	5 31	6 31	sets	7 10
27	Wednesday	♎	10 7 54	5 20	6 42	7 33	11 57	5 23	6 39	7 31	8 57	5 24	6 38	7 31	5 32	6 30	7 25	7 57
28	Thursday .	♎	9 46 47	5 21	6 40	8 6	morn	5 24	6 38	8 6	9 41	5 25	6 36	8 6	5 33	6 29	8 5	8 41
29	Friday....	♏	9 25 31	5 22	6 38	8 38	0 41	5 25	6 36	8 39	10 26	5 26	6 35	8 40	5 33	6 28	8 43	9 26
30	Saturday..	♏	9 4 5	5 24	6 37	9 10	1 26	5 26	6 35	9 12	11 11	5 27	6 33	9 14	5 34	6 27	9 21	10 11
31	E	♏	8 42 31	5 25	6 35	9 43	2 11	5 27	6 33	9 47	11 54	5 28	6 32	9 50	5 35	6 25	10 0	10 54

DAIRY STEAMER.

The annexed cut represents an apparatus extensively used in Herkimer and Oneida counties, N. Y., for the purpose of heating milk, in the manufacture of cheese. It was invented by G. Farmer, Herkimer, Herkimer county, N. Y. It consists of a boiler for the generation of steam, attached to a stove or furnace. A pipe is attached to the boiler for conveying the steam to the vessel where the milk is heated. The milk is contained in a tin vessel, and this vessel is placed in a wooden vat, of such dimensions as to leave a space of two inches at the bottom, sides, and ends.—This space is filled with water. When the milk is heated for the application of rennet, the steam-pipe is let into the water, and the steam let on and continued till the milk is warmed to the required degree, which should be ascertained by plunging a thermometer into it. Dairymen are not exactly agreed as to the degree of heat to which milk should be raised: but none recommend less than 82°, or more than 90°.



One great advantage of this process is, that the heat is equally diffused through the whole mass, without any portion of it being exposed to an excessive degree. The size of the tin vat for containing the milk has been given as follows: For a dairy of 30 cows, 2¼ feet wide, 6 feet long, and 19 inches deep The night milk is strained into the tin vat, which is surrounded with cold water, in order to keep it properly cool till next morning, when the morning milk is added, and the water heated by steam, for "running up" the curd. A branch of the steam pipe is connected with a tub or vat for heating water for washing utensils, &c., used in the dairy. It is best to fill the vat with water, as it is found that the larger the quantity of water, the more equally the milk is heated.

Richness of Milk.—An experienced farmer says: "I find by churning the milk separate, that one of my best cows will make as much butter as three of my poorest cows, giving the same quantity of milk."

9th MONTH. **SEPTEMBER, 1851.** **30 Days.**

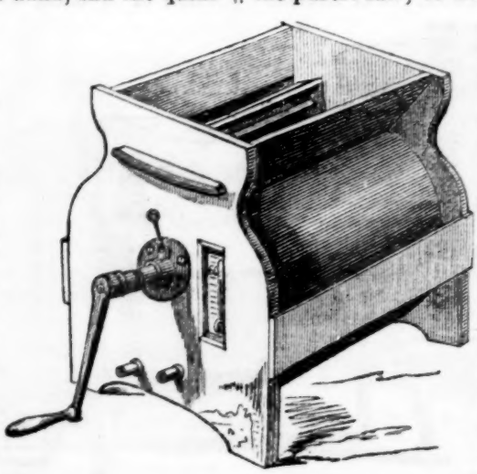
MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIMORE.	CHARLESTON	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
First Quarter,	2 9 9 mo.	8 57 mo.	8 46 mo.	8 33 mo.	1 morning.
Full Moon,	10 9 0 mo.	8 48 mo.	8 37 mo.	8 24 mo.	9 11 57 18
Third Quarter,	18 8 45 mo.	8 33 mo.	8 22 mo.	8 9 mo.	17 11 54 30
New Moon,	25 1 28 mo.	1 16 mo.	1 5 mo.	0 52 mo.	25 11 51 43

Put land in the best condition before sowing wheat—manure will do well and much improve the crop, if it is well pulverized and thoroughly intermixed with the soil, by repeated plowings and many harrowings.—Cut up corn at the roots, as soon as the husks and leaves turn brown.

Day of Month.	Day of Week.	Sun's declina'n N.	Moon's Place.	CALENDAR For Boston, New-England New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.				CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
				Sun rises.	Sun sets.	Moon sets.	H. W. Bos'n.	Sun rises.	Sun sets.	Moon sets.	H. W. N.Y'k	Sun rises.	Sun sets.	Moon sets.		Sun rises.	Sun sets.	Moon sets.	H. W. Ch'ton
		° ′ ″	♍	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.		H. M.	H. M.	H. M.	H. M.
1	Monday ..	8 20 49	♐	5 26	6 33	10 19	2 54	5 28	6 32	10 24	morn	5 29	6 30	10 28		5 35	6 24	10 41	11 38
2	Tuesday ..	7 58 59	♐	5 27	6 32	11 0	3 38	5 29	6 30	11 5	0 38	5 30	6 29	11 9		5 36	6 23	11 25	morn
3	Wednesday	7 37 0	♑	5 28	6 30	11 44	4 27	5 30	6 28	11 50	1 27	5 31	6 27	11 55		5 37	6 21	morn	0 27
4	Thursday .	7 14 55	♑	5 29	6 28	morn	5 24	5 31	6 27	morn	2 24	5 32	6 26	morn		5 37	6 20	0 12	1 24
5	Friday	6 52 43	♒	5 30	6 27	0 34	6 41	5 31	6 25	0 40	3 41	5 33	6 24	0 44		5 38	6 19	1 2	2 41
6	Saturday..	6 30 24	♒	5 31	6 25	1 27	8 4	5 32	6 24	1 33	5 4	5 34	6 22	1 38		5 39	6 18	1 55	4 4
7	E	6 7 59	♒	5 32	6 23	2 24	9 21	5 33	6 22	2 29	6 21	5 35	6 21	2 33		5 39	6 16	2 49	5 21
8	Monday ...	5 45 28	♓	5 33	6 22	3 22	10 18	5 34	6 20	3 27	7 18	5 35	6 19	3 31		5 40	6 15	3 44	6 18
9	Tuesday ..	5 22 50	♓	5 34	6 20	4 21	11 1	5 35	6 19	4 25	8 1	5 36	6 18	4 28		5 40	6 14	4 39	7 1
10	Wednesday	5 0 7	♈	5 35	6 18	rises	11 39	5 36	6 17	rises	8 39	5 37	6 16	rises		5 41	6 12	rises	7 39
11	Thursday .	4 37 20	♈	5 36	6 16	7 13	ev 10	5 37	6 15	7 13	9 10	5 38	6 14	7 13		5 42	6 11	7 10	8 10
12	Friday	4 14 28	♈	5 37	6 15	7 38	0 40	5 38	6 14	7 38	9 40	5 39	6 13	7 39		5 42	6 10	7 40	8 40
13	Saturday..	3 51 31	♉	5 38	6 13	8 3	1 9	5 39	6 12	8 4	10 9	5 40	6 11	8 6		5 43	6 8	8 10	9 9
14	E	3 28 30	♉	5 39	6 11	8 29	1 40	5 40	6 10	8 32	10 40	5 41	6 10	8 34		5 44	6 7	8 42	9 40
15	Monday ...	3 5 25	♉	5 40	6 9	8 59	2 8	5 41	6 9	9 3	11 8	5 42	6 8	9 6		5 44	6 6	9 16	10 8
16	Tuesday ..	2 42 16	♊	5 41	6 8	9 33	2 39	5 42	6 7	9 38	11 39	5 43	6 6	9 41		5 45	6 4	9 55	10 39
17	Wednesday	2 19 5	♊	5 42	6 6	10 13	3 15	5 43	6 5	10 18	ev 15	5 44	6 5	10 22		5 46	6 3	10 38	11 15
18	Thursday .	1 55 50	♊	5 44	6 4	11 0	3 56	5 44	6 4	11 6	0 56	5 44	6 3	11 11		5 46	6 2	11 28	11 56
19	Friday	1 32 33	♋	5 45	6 2	11 56	4 49	5 45	6 2	morn	1 49	5 45	6 2	morn		5 47	6 0	morn	ev 49
20	Saturday..	1 9 13	♋	5 46	6 1	morn	6 5	5 46	6 0	0 2	3 5	5 46	6 0	0 7		5 48	5 59	0 25	2 5
21	E	0 45 52	♌	5 47	5 59	1 1	7 35	5 47	5 59	1 6	4 35	5 47	5 58	1 11		5 48	5 58	1 27	3 35
22	Monday ...	N 22 28	♌	5 48	5 57	2 12	9 0	5 48	5 57	2 17	6 0	5 48	5 57	2 20		5 49	5 56	2 35	5 0
23	Tuesday ..	S 0 56	♍	5 49	5 55	3 27	10 0	5 49	5 55	3 31	7 0	5 49	5 55	3 34		5 50	5 55	3 45	6 0
24	Wednesday	0 24 21	♍	5 50	5 53	sets	10 52	5 50	5 53	sets	7 52	5 50	5 53	sets		5 50	5 53	sets	6 52
25	Thursday .	0 47 46	♎	5 51	5 52	6 33	11 36	5 51	5 52	6 34	8 36	5 51	5 52	6 34		5 51	5 52	6 35	7 36
26	Friday	1 11 12	♎	5 52	5 50	7 6	morn	5 52	5 50	7 7	9 20	5 52	5 50	7 9		5 52	5 51	7 13	8 20
27	Saturday..	1 34 38	♏	5 53	5 48	7 39	0 20	5 53	5 48	7 42	10 4	5 53	5 49	7 45		5 52	5 49	7 53	9 4
28	E	1 58 2	♏	5 54	5 46	8 15	1 4	5 54	5 47	8 19	10 46	5 54	5 47	8 23		5 53	5 48	8 35	9 46
29	Monday ...	2 21 25	♐	5 56	5 44	8 55	1 46	5 55	5 45	9 0	11 27	5 55	5 45	9 4		5 54	5 47	9 19	10 27
30	Tuesday ..	2 44 48	♐	5 57	5 43	9 39	2 27	5 56	5 43	9 44	morn	5 56	5 44	9 49		5 54	5 45	10 6	11 8

BUTTER MAKING.

THERE is about as much difference between good and bad butter, as there is between nectar and lamp oil. Sweet-flavored golden rolls on one hand, and the quintessence of rancidity on the other, are enough to convince any one that there is a good and a bad way of making it. The first and last requisite is to keep every thing *clean* and as pure as cleansing can make them. Even the cows must be kept in a clean pasture, with sweet feed and pure water. Every vessel should be thoroughly purified the moment it is out of use. We always notice a glittering row of polished tin pans, placed out in the open air, by one of our near neighbors, who is an excellent butter maker.



The chief points, besides cleanliness, in making good butter, are these: To milk at regular hours; to place the milk in shallow vessels; to have a perfectly clean cellar, with a hard brick or flag stone bottom, and with shutters and wire screen windows, to admit air and exclude insects; to skim the milk the moment it coagulates or "lobbers," which will be in 30 to 48 hours; to churn the cream at a temperature between 60 and 65° by the thermometer; to free the butter as much as possible from buttermilk, and then add a sixteenth part of the purest salt; to work out the remaining buttermilk in 12 hours afterwards, and again in 24 hours, being careful not to work it too much at a time; to pack it closely in stone jars, till nearly full, and then spread clean white muslin cloth over the top, pack closely a layer of one inch of fine salt upon the muslin, and finally cover the jar with a neatly fitting tin cover. This is, substantially, the process of most of the best butter makers. Butter thus made will keep a year, if placed on the bottom of a cool cellar.

A very important part of churning, is to preserve the cream at the right temperature during the whole process. Persons of skill and experience will do this tolerably well, by setting the cream vessel into warm or cold water, or ice, as the case may require; but the simplest way is to use a THERMOMETER CHURN, a figure of which we here give. By means of a thermomer attached to the churn, the temperature is regulated with precision, by pouring warm or cold water into a space next to the cream.

10th Month. OCTOBER, 1851. 31 Days.

MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIMORE.	CHARLESTON.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
First Quarter,.	1 9 46 ev.	9 34 ev.	9 23 ev.	9 10 ev.	1 11 49 44
Full Moon, ...	10 1 49 mo.	1 37 mo.	1 26 mo.	1 13 mo.	9 11 47 22
Third Quarter,	17 7 29 ev.	7 17 ev.	7 6 ev.	6 53 ev.	17 11 45 28
New Moon, ...	24 10 26 mo.	10 14 mo.	10 3 mo.	9 50 mo.	25 11 44 13
First Quarter,.	31 2 34 ev.	2 22 ev.	2 11 ev.	1 58 ev.	.....

Husk corn—see that the stalks are well secured from wet—apply salt in stacking them. Dig potatoes—and to prevent their rotting, let them be dry, clean, and kept in a cool place. Gather winter apples—let them all be carefully hand-picked, using light and convenient ladders, and avoid bruising the tree.

Day of Month.	Day of Week.	Sun's declina'n N.	Moon's Place.	CALENDAR For Boston, New-England New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.				CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
				Sun rises.	Sun sets.	Moon sets.	H. W. Bost'n	Sun rises.	Sun sets.	Moon sets.	H. W N.Y'k	Sun rises.	Sun sets.	Moon sets.		Sun rises.	Sun sets.	Moon sets.	H. W. Ch'ton
		° ′ ″	♈	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.	H. M.	H.M.	H.M.	H. M.		H.M.	H.M.	H. M.	H. M.
1	Wednesday	3 8 9	♈	5 58	5 41	10 27	3 8	5 57	5 42	10 34	0 8	5 57	5 42	10 38		5 55	5 44	10 56	11 55
2	Thursday .	3 31 27	♈	5 59	5 39	11 21	3 55	5 58	5 40	11 27	0 55	5 58	5 40	11 31		5 56	5 43	11 49	morn
3	Friday....	3 54 44	♒	6 0	5 37	morn	4 53	5 59	5 38	morn	1 53	5 59	5 39	morn		5 56	5 41	morn	0 53
4	Saturday..	4 17 57	♒	6 1	5 36	0 17	6 11	6 0	5 37	0 23	3 11	6 0	5 37	0 27		5 57	5 40	0 44	2 11
5	E	4 41 8	♓	6 2	5 34	1 15	7 37	6 1	5 35	1 20	4 37	6 1	5 36	1 24		5 58	5 39	1 38	3 37
6	Monday ...	5 4 14	♓	6 3	5 32	2 14	8 56	6 2	5 33	2 18	5 56	6 2	5 34	2 21		5 58	5 38	2 33	4 56
7	Tuesday ..	5 27 16	♓	6 5	5 31	3 13	9 55	6 4	5 32	3 16	6 55	6 3	5 33	3 19		5 59	5 36	3 27	5 55
8	Wednesday	5 50 15	♈	6 6	5 29	4 12	10 34	6 5	5 30	4 14	7 34	6 4	5 31	4 16		6 0	5 35	4 21	6 34
9	Thursday .	6 13 8	♈	6 7	5 27	rises	11 10	6 6	5 29	rises	8 10	6 5	5 29	rises		6 1	5 34	rises	7 10
10	Friday....	6 35 57	♉	6 8	5 26	6 7	11 39	6 7	5 27	6 8	8 38	6 6	5 28	6 9		6 1	5 32	6 12	7 38
11	Saturday..	6 58 41	♉	6 9	5 24	6 33	ev 8	6 8	5 25	6 35	9 8	6 7	5 26	6 37		6 2	5 31	6 43	8 8
12	E	7 21 19	♉	6 10	5 22	7 1	0 38	6 9	5 24	7 5	9 38	6 8	5 25	7 7		6 3	5 30	7 17	8 38
13	Monday ...	7 43 50	♊	6 11	5 21	7 33	1 9	6 10	5 22	7 38	10 9	6 9	5 23	7 41		6 4	5 29	7 54	9 9
14	Tuesday ..	8 6 16	♊	6 13	5 19	8 11	1 40	6 11	5 21	8 16	10 40	6 10	5 22	8 20		6 4	5 28	8 35	9 40
15	Wednesday	8 28 35	♊	6 14	5 17	8 55	2 12	6 12	5 19	9 1	11 12	6 11	5 20	9 5		6 5	5 26	9 23	10 12
16	Thursday .	8 50 47	♋	6 15	5 16	9 47	2 48	6 13	5 18	9 53	11 48	6 12	5 19	9 58		6 5	5 25	10 16	10 48
17	Friday....	9 12 52	♋	6 16	5 14	10 46	3 32	6 14	5 16	10 52	ev 32	6 13	5 18	10 57		6 7	5 24	11 14	11 32
18	Saturday..	9 34 48	♌	6 17	5 13	11 53	4 27	6 15	5 15	11 58	1 27	6 14	5 16	morn		6 7	5 23	morn	ev 27
19	E	9 56 36	♌	6 19	5 11	morn	5 43	6 17	5 13	morn	2 43	6 15	5 15	0 2		6 8	5 22	0 18	1 43
20	Monday ...	10 18 15	♍	6 20	5 9	1 4	7 16	6 18	5 12	1 8	4 16	6 16	5 13	1 12		6 9	5 21	1 25	3 16
21	Tuesday ..	10 39 47	♍	6 21	5 8	2 18	8 41	6 19	5 10	2 21	5 41	6 17	5 12	2 24		6 10	5 19	2 33	4 41
22	Wednesday	11 1 8	♎	6 22	5 6	3 34	9 40	6 20	5 9	3 36	6 40	6 18	5 11	3 37		6 11	5 18	3 42	5 40
23	Thursday .	11 22 19	♎	6 23	5 5	4 50	10 29	6 21	5 7	4 51	7 29	6 19	5 9	4 51		6 11	5 17	4 52	6 29
24	Friday....	11 43 20	♏	6 25	5 3	sets	11 13	6 22	5 6	sets	8 13	6 20	5 8	sets		6 12	5 16	sets	7 13
25	Saturday..	12 4 11	♏	6 26	5 2	6 7	11 57	6 23	5 5	6 11	8 57	6 21	5 6	6 14		6 13	5 15	6 24	7 57
26	E	12 24 50	♐	6 27	5 0	6 46	morn	6 24	5 3	6 50	9 41	6 22	5 5	6 54		6 14	5 14	7 8	8 41
27	Monday ...	12 45 18	♐	6 28	4 59	7 29	0 41	6 26	5 2	7 34	10 21	6 24	5 4	7 39		6 15	5 13	7 55	9 21
28	Tuesday ..	13 5 34	♐	6 30	4 58	8 17	1 21	6 27	5 0	8 23	11 2	6 25	5 3	8 28		6 15	5 12	8 46	10 2
29	Wednesday	13 25 38	♑	6 31	4 56	9 10	2 2	6 28	4 59	9 16	11 44	6 26	5 1	9 21		6 16	5 11	9 39	10 44
30	Thursday .	13 45 29	♑	6 32	4 55	10 7	2 44	6 29	4 58	10 13	morn	6 27	5 0	10 17		6 17	5 10	10 35	11 29
31	Friday....	14 5 6	♒	6 33	4 54	11 5	3 29	6 30	4 57	11 11	0 29	6 28	4 59	11 15		6 18	5 9	11 30	morn

COOKING FOOD FOR ANIMALS.

In fattening swine, a great advantage has resulted in giving them cooked food. Some of the best and most accurate farmers of our acquaintance, have found that corn ground and cooked is so much better digested and assimilated by their hogs, that one bushel of cooked corn is worth as much as two and a half bushels fed unground or in the ear. The trouble and expense of cooking cannot be equal to one half of this waste; every farmer, therefore, who feeds out 500 bushels of corn in the ear, actually throws away about 200 bushels, which may be equal to the whole amount of what would otherwise be his clear profits in pork making.

One of the best things in the world for cooking food, is Mott's Agricultural Furnace, represented in the annexed wood cut. It is wholly of cast iron, the stove and boiler being connected together, and the whole being quite portable. The fire passes up around the boiler, through a thin space surrounding its entire outer surface; and a very small quantity of wood will heat a large body of water. A man may easily carry in his arms enough wood to boil two barrels of water. We have found it to need only *a third* of the fuel formerly required for a kettle set in a common brick "arch."

The same advantages do not pertain to cooking for *cattle*, except to soften and improve some hard kinds of food. One of the best farmers in the country pursues the following practice: The chaff is stowed away in bins, to be mixed in winter with cut straw and corn-stalks. This mixture is placed in large barrels in the barn cellar, and hot water, from one of Mott's Furnaces, poured in to moisten the whole. The barrels are instantly covered, and in a few hours the chaff and cut feed are well cooked, and are eaten with great avidity by the cattle before it is yet cold.

A great advantage resulting from this mode of feeding is, that the manure from the stalks and coarse feed is always *short*, and quickly intermixes and is decomposed.

Feeding Cattle in Winter.—The American Farmer says, "A neighbor of ours had an oblong tight box made, with a top—he filled this box with cut stalks, poured over them a pot of boiling water, shut down the lid and put a weight upon it, and thus cooked them with the steam. By the time the water became milk-warm, the stalks were sufficiently cooked. For his milch cows, he had bran or mill feed mixed; and they were always in a thriving condition."

If you would have your business done, go; if not, send. The sleeping fox catches no poultry.

11th MONTH. NOVEMBER, 1851. 30 Days.

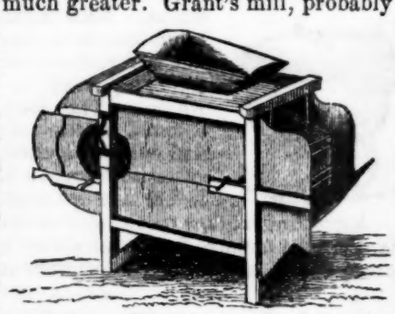
MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIMORE.	CHARLESTON.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
New Moon, ...	8 6 37 ev.	6 25 ev.	6 14 ev.	6 1 ev.	1 11 43 44
First Quarter,.	16 4 38 mo.	4 26 mo.	4 15 mo.	4 2 mo.	9 11 43 59
Full Moon,....	22 9 22 ev.	9 10 ev.	8 59 ev.	8 46 ev.	17 11 45 7
Third Quarter,	30 10 43 mo.	10 31 mo.	10 20 mo.	10 7 mo.	25 11 47 9

Secure remaining crops—ruta bagas, carrots, &c., as speedily as possible—when buried in heaps, ventilate all roots, by small holes in the top of the heap, till freezing weather. Ruta bagas will invariably spoil unless thus secured, and potatoes often.

Day of Month.	Day of Week.	Sun's declina'n N.	Moon's Place.	CALENDAR For Boston, New-England New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.			CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
				Sun rises.	Sun sets.	Moon sets.	H. W. Bos'n.	Sun rises.	Sun sets.	Moon sets.	H. W. N.Y'k	Sun rises.	Sun sets.	Moon sets.	Sun rises.	Sun sets.	Moon sets.	H. W. Ch'ton
		° ′ ″		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	Saturday..	14 24 30	♓	6 35	4 52	morn	4 22	6 32	4 55	morn	1 22	6 29	4 58	morn	6 19	5 8	morn	0 22
2	E	14 43 40	♓	6 36	4 51	0 5	5 31	6 33	4 54	0 9	2 31	6 30	4 57	0 13	6 20	5 7	0 26	1 31
3	Monday ..	15 2 36	♓	6 37	4 50	1 4	6 56	6 34	4 53	1 8	3 56	6 31	4 55	1 10	6 21	5 6	1 20	2 56
4	Tuesday ..	15 21 17	♈	6 38	4 48	2 3	8 14	6 35	4 52	2 6	5 14	6 33	4 54	2 7	6 22	5 6	2 14	4 14
5	Wednesday	15 39 42	♈	6 40	4 47	3 2	9 18	6 36	4 51	3 3	6 18	6 34	4 53	3 5	6 22	5 5	3 8	5 18
6	Thursday .	15 57 52	♉	6 41	4 46	4 1	10 0	6 38	4 50	4 1	7 0	6 35	4 52	4 2	6 23	5 4	4 2	6 0
7	Friday	16 15 45	♉	6 42	4 45	5 1	10 35	6 39	4 48	5 0	7 35	6 36	4 51	5 0	6 24	5 3	4 56	6 35
8	Saturday..	16 33 23	♉	6 44	4 44	rises	11 8	6 40	4 47	rises	8 8	6 37	4 50	rises	6 25	5 2	rises	7 8
9	E	16 50 44	♊	6 45	4 43	5 35	11 39	6 41	4 46	5 39	8 39	6 38	4 49	5 42	6 26	5 2	5 54	7 39
10	Monday ...	17 7 47	♊	6 46	4 42	6 10	ev 13	6 42	4 45	6 15	9 13	6 39	4 48	6 19	6 27	5 1	6 34	8 13
11	Tuesday ..	17 24 33	♊	6 47	4 41	6 53	0 45	6 44	4 44	6 58	9 45	6 41	4 47	7 3	6 28	5 0	7 20	8 45
12	Wednesday	17 41 1	♋	6 49	4 40	7 42	1 17	6 45	4 43	7 48	10 17	6 42	4 46	7 53	6 29	4 59	8 11	9 17
13	Thursday .	17 57 11	♋	6 50	4 39	8 39	1 52	6 46	4 42	8 45	10 52	6 43	4 46	8 50	6 30	4 59	9 8	9 52
14	Friday	18 13 1	♋	6 51	4 38	9 43	2 33	6 47	4 42	9 48	11 33	6 44	4 45	9 53	6 31	4 58	10 9	10 33
15	Saturday..	18 28 33	♌	6 52	4 37	10 51	3 21	6 48	4 41	10 56	ev 21	6 45	4 44	11 0	6 32	4 58	11 14	11 21
16	E	18 43 45	♌	6 54	4 36	morn	4 17	6 50	4 40	morn	1 17	6 46	4 43	morn	6 32	4 57	morn	ev 17
17	Monday ...	18 58 38	♍	6 55	4 35	0 2	5 27	6 51	4 39	0 6	2 27	6 48	4 42	0 9	6 33	4 57	0 20	1 27
18	Tuesday ..	19 13 10	♍	6 56	4 34	1 15	6 54	6 52	4 38	1 17	3 54	6 49	4 42	1 19	6 34	4 56	1 26	2 54
19	Wednesday	19 27 21	♎	6 57	4 33	2 28	8 12	6 53	4 38	2 30	5 12	6 50	4 41	2 30	6 35	4 56	2 33	4 12
20	Thursday .	19 41 12	♎	6 59	4 32	3 42	9 14	6 54	4 37	3 42	6 14	6 51	4 40	3 42	6 36	4 55	3 40	5 14
21	Friday	19 54 40	♏	7 0	4 32	4 56	10 5	6 55	4 36	4 55	7 5	6 52	4 40	4 54	6 37	4 55	4 48	6 5
22	Saturday..	20 7 48	♏	7 1	4 31	sets	10 53	6 57	4 36	sets	7 53	6 53	4 39	sets	6 38	4 54	sets	6 53
23	E	20 20 33	♐	7 2	4 30	5 18	11 38	6 58	4 35	5 23	8 38	6 54	4 38	5 27	6 39	4 54	5 42	7 38
24	Monday ...	20 32 56	♐	7 4	4 30	6 3	morn	6 59	4 34	6 9	9 20	6 55	4 38	6 14	6 40	4 54	6 32	8 20
25	Tuesday ..	20 44 55	♑	7 5	4 29	6 55	0 20	7 0	4 34	7 2	10 1	6 56	4 37	7 6	6 41	4 53	7 25	9 1
26	Wednesday	20 56 32	♑	7 6	4 29	7 52	1 1	7 1	4 33	7 58	10 43	6 58	4 37	8 3	6 42	4 53	8 21	9 43
27	Thursday .	21 7 44	♒	7 7	4 28	8 51	1 43	7 2	4 33	8 57	11 25	6 59	4 37	9 1	6 43	4 53	9 18	10 25
28	Friday	21 18 34	♒	7 8	4 28	9 52	2 25	7 3	4 32	9 57	morn	7 0	4 36	10 0	6 43	4 53	10 15	11 8
29	Saturday..	21 28 58	♒	7 9	4 27	10 52	3 8	7 4	4 32	10 56	0 8	7 1	4 36	10 59	6 44	4 52	11 11	11 55
30	E	21 38 58	♓	7 11	4 27	11 52	3 55	7 6	4 32	11 55	0 55	7 2	4 36	11 57	6 45	4 52	morn	morn

GRANT'S FANNING MILL.

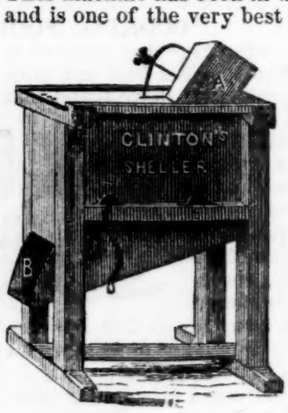
OLD farmers will recollect the mode of freeing grain from the chaff before the fanning mill was introduced, by shaking it through a coarse sieve on a windy day. Great as was the improvement by the use of the fanning mill, the after improvements of this machine have been, perhaps, as much greater. Grant's mill, probably the best now in use, and which has, we believe, received the premium at every agricultural fair where it has been exhibited, will chaff and screen one bushel of wheat per minute, taking out the chess, cockle, and smut, at one operation. Some have stated that by its use, they have saved enough timothy seed in one season to pay for the mill. It is adapted to cleaning wheat, rye, buckwheat, oats, barley, rice, corn, peas, beans, flax seed, timothy and clover seed. The price is from $21 to $27.



MILKING.—See that cows are milked very clean; more so than most boys and hired men can be coaxed or compelled to do it.

CLINTON CORN SHELLER.

THIS machine has been in use for more than ten years, and is one of the very best sorts. With two men, two hundred bushels of ears may be shelled in a day, or with a double hopper, so as to shell two ears at a time, double that amount may be done by three men—quite an improvement over the old mode, yet in use in many places, of thumping out the cobs by the tedious process of hand flails. The price of this sheller is from ten to thirteen dollars.—How much will be saved by it, every farmer can easily estimate after he has tried it.



ENRICHING FARMING.—Some of the best farmers have learned that the most profitable farming is that which increases the fertility of their land. Instead of raising chiefly grain to sell, they manufacture manure largely. One of the best farmers in Seneca county, N. Y., says on this subject, "I have been changing my system of farming altogether, by raising great crops of corn and fattening cattle in winter; have fatted 83 head since fall, all steers, and have sold sixty, from $50 to $55 per head, and have 23 yet on hand. I intend to plant 40 acres of corn next season."

12th Month. **DECEMBER, 1851.** **31 Days.**

MOON'S PHASES.	BOSTON.	NEW-YORK.	BALTIMORE.	CHARLESTON.	SUN ON MERIDIAN.
	D. H. M.	H. M.	H. M.	H. M.	D. H. M. S.
Full Moon,....	8 10 43 mo.	10 31 mo.	10 20 mo.	10 7 mo.	1 11 49 12
Third Quarter,	15 0 42 ev.	0 30 ev.	0 19 ev.	0 6 ev.	9 11 52 31
New Moon, ...	22 10 50 mo.	10 38 mo.	10 27 mo.	10 14 mo.	17 11 56 18
First Quarter,.	30 8 31 mo.	8 19 mo.	8 8 mo.	7 55 mo.	25 ev 0 17

Commence winter with a well digested, regular, neat, and thorough system of wintering domestic animals. Provide feeding racks to save hay—thresh grain early, to elude the rats—draw wood, saw wood—draw muck from drained swamps to spread over barn yards.

Day of Month.	Day of Week.	Sun's declina'n N.	Moon's Place.	CALENDAR, For Boston, New-England New-York State, Michigan, Wisconsin, and Iowa.				CALENDAR For New-York City, Philadelphia, Conn., New-Jersey, Pennsyl'a, Ohio, Indiana, and Illinois.				CALENDAR For Baltimore, Virginia, Kentucky, and Missouri.			CALENDAR For Charleston, N. Carolina, Tenn., Georgia, Alabama, Mississippi, and Louisiana.			
				Sun rises.	Sun sets.	Moon sets.	H. W. Bost'n	Sun rises.	Sun sets.	Moon sets.	H. W. N.Y'k	Sun rises.	Sun sets.	Moon sets.	Sun rises.	Sun sets.	Moon sets.	H. W. Ch'ton
		° ′ ″		H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.	H. M.
1	Monday ...	21 48 33	♓	7 12	4 26	morn	4 49	7 7	4 31	morn	1 49	7 3	4 35	morn	6 46	4 52	0 5	0 49
2	Tuesday ..	21 57 43	♓	7 13	4 26	0 51	5 55	7 8	4 31	0 53	2 55	7 4	4 35	0 54	6 47	4 52	0 59	1 55
3	Wednesday	22 6 28	♈	7 14	4 26	1 49	7 9	7 9	4 31	1 50	4 9	7 5	4 35	1 51	6 48	4 52	1 52	3 9
4	Thursday .	22 14 46	♈	7 15	4 26	2 49	8 16	7 10	4 31	2 49	5 16	7 6	4 35	2 48	6 49	4 52	2 46	4 16
5	Friday....	22 22 39	♉	7 16	4 25	3 49	9 11	7 11	4 31	3 48	6 11	7 7	4 35	3 47	6 49	4 52	3 42	5 11
6	Saturday..	22 30 6	♉	7 17	4 25	4 51	9 56	7 12	4 31	4 49	6 56	7 8	4 35	4 47	6 50	4 52	4 39	5 56
7	E	22 37 6	♊	7 18	4 25	5 55	10 33	7 13	4 30	5 51	7 33	7 9	4 34	5 49	6 51	4 52	5 37	6 33
8	Monday ...	22 43 40	♊	7 19	4 25	rises	11 11	7 13	4 30	rises	8 11	7 9	4 34	rises	6 52	4 52	rises	7 11
9	Tuesday ..	22 49 46	♋	7 20	4 25	5 36	11 49	7 14	4 30	5 42	8 49	7 10	4 35	5 47	6 53	4 52	6 5	7 49
10	Wednesday	22 55 27	♋	7 21	4 25	6 32	ev 26	7 15	4 31	6 38	9 26	7 11	4 35	6 43	6 53	4 52	7 1	8 26
11	Thursday .	23 0 39	♌	7 21	4 25	7 34	1 3	7 16	4 31	7 40	10 3	7 12	4 35	7 45	6 54	4 53	8 2	9 3
12	Friday....	23 5 24	♌	7 22	4 25	8 42	1 44	7 17	4 31	8 48	10 44	7 13	4 35	8 52	6 55	4 53	9 7	9 44
13	Saturday..	23 9 42	♍	7 23	4 25	9 53	2 26	7 18	4 31	9 57	11 26	7 14	4 35	10 1	6 56	4 53	10 12	10 26
14	E	23 13 32	♍	7 24	4 26	11 5	3 15	7 18	4 31	11 8	ev 15	7 14	4 35	11 10	6 56	4 53	11 18	11 15
15	Monday ...	23 16 54	♎	7 25	4 26	morn	4 11	7 19	4 31	morn	1 11	7 15	4 35	morn	9 57	4 54	morn	ev 11
16	Tuesday ..	23 19 49	♎	7 25	4 26	0 17	5 13	7 20	4 32	0 18	2 13	7 16	4 36	0 20	6 58	4 54	0 24	1 13
17	Wednesday	23 22 16	♏	7 26	4 26	1 28	6 26	7 21	4 32	1 29	3 26	7 16	4 36	1 29	6 58	4 54	1 29	2 26
18	Thursday .	23 24 14	♏	7 27	4 27	2 40	7 36	7 21	4 32	2 39	4 36	7 17	4 36	2 38	6 59	4 55	2 34	3 36
19	Friday....	23 25 45	♐	7 27	4 27	3 52	8 46	7 22	4 33	3 50	5 46	7 18	4 37	3 48	6 59	4 55	3 40	4 46
20	Saturday..	23 26 46	♐	7 28	4 28	5 3	9 42	7 23	4 33	5 0	6 42	7 18	4 37	4 58	7 0	4 56	4 46	5 42
21	E	23 27 21	♑	7 29	4 28	6 13	10 33	7 23	4 34	6 9	7 33	7 19	4 38	6 6	7 0	4 56	5 51	6 33
22	Monday ...	23 27 26	♑	7 29	4 29	sets	11 23	7 24	4 34	sets	8 23	7 19	4 38	sets	7 1	4 57	sets	7 23
23	Tuesday ..	23 27 3	♑	7 30	4 29	5 36	morn	7 24	4 35	5 43	9 8	7 20	4 39	5 48	7 1	4 57	6 6	8 8
24	Wednesday	23 26 12	♒	7 30	4 30	6 35	0 8	7 25	4 35	6 41	9 49	7 20	4 39	6 46	7 2	4 58	7 4	8 49
25	Thursday .	23 24 52	♒	7 30	4 30	7 36	0 49	7 25	4 36	7 41	10 30	7 21	4 40	7 46	7 2	4 58	8 1	9 30
26	Friday....	23 23 6	♒	7 31	4 31	8 38	1 30	7 25	4 36	8 42	11 9	7 21	4 41	8 46	7 3	4 59	8 58	10 9
27	Saturday..	23 20 49	♓	7 31	4 31	9 38	2 9	7 26	4 37	9 42	11 47	7 21	4 41	9 44	7 3	4 59	9 54	10 47
28	E	23 18 5	♓	7 31	4 32	10 38	2 47	7 26	4 38	10 40	morn	7 22	4 42	10 42	7 4	5 0	10 48	11 28
29	Monday ...	23 14 52	♓	7 32	4 33	11 37	3 28	7 26	4 38	11 38	0 28	7 22	4 43	11 39	7 4	5 1	11 42	morn
30	Tuesday ..	23 11 13	♈	7 32	4 34	morn	4 10	7 26	4 39	morn	1 10	7 22	4 43	morn	7 4	5 1	morn	0 10
31	Wednesday	23 7 5	♈	7 32	4 35	0 35	4 57	7 27	4 40	0 36	1 57	7 22	4 44	0 36	7 4	5 2	0 35	0 57

SEASONABLE HINTS.

THE work for the past season being now closed, the farmer has a most important part yet to act—that is, preparing for the next. He has worked hard for many months past, and has, perhaps, fine herds of cattle, sheep, swine, &c., to carry through the winter. He has also collected, by hard labor, large stores of provender. Now, in order that this provender may be most economically consumed—and in order that next spring may dawn upon fine, plump, healthy animals—he must see to them himself. "If you would have a faithful and intelligent servant, serve yourself," said Dr. Franklin, and "diligence is the mother of good luck." A rich, thrifty, money-making farmer of our acquaintance, who keeps scores of fine cattle, lays his own hand on the back of every one of them, without missing a day through winter. He knows in a moment by the touch, whether they are well cared for.

Animals, to thrive to best advantage, must be kept clean, comfortable, and fed with great regularity. Cold, dirt, fretting beyond the regular time for food, suffering for water—all these waste the flesh, and consume the profits.

Dr. Franklin said that "one to-day is worth two to-morrows," and every farmer should do as much as practicable through winter, to save time next summer. He should draw, cut, and house his fire wood; repair tools, oil harness; make feeding racks and boxes for his animals; repair out-buildings; prune orchards; make fruit ladders; and above all, examine the best modes of practice in all the departments of farming, by reading—by ascertaining wherein consisted the success of the best farmers of the country, to enable him to do which, he should not only subscribe for "THE CULTIVATOR," but study each number, as it comes to hand, thoroughly, and he will in this way obtain a vast amount of information, which he will find a source of profit as well as pleasure, through the labors of the year.

Feed all fattening animals with perfect regularity—enough, but not too much.

A MONTHLY JOURNAL OF

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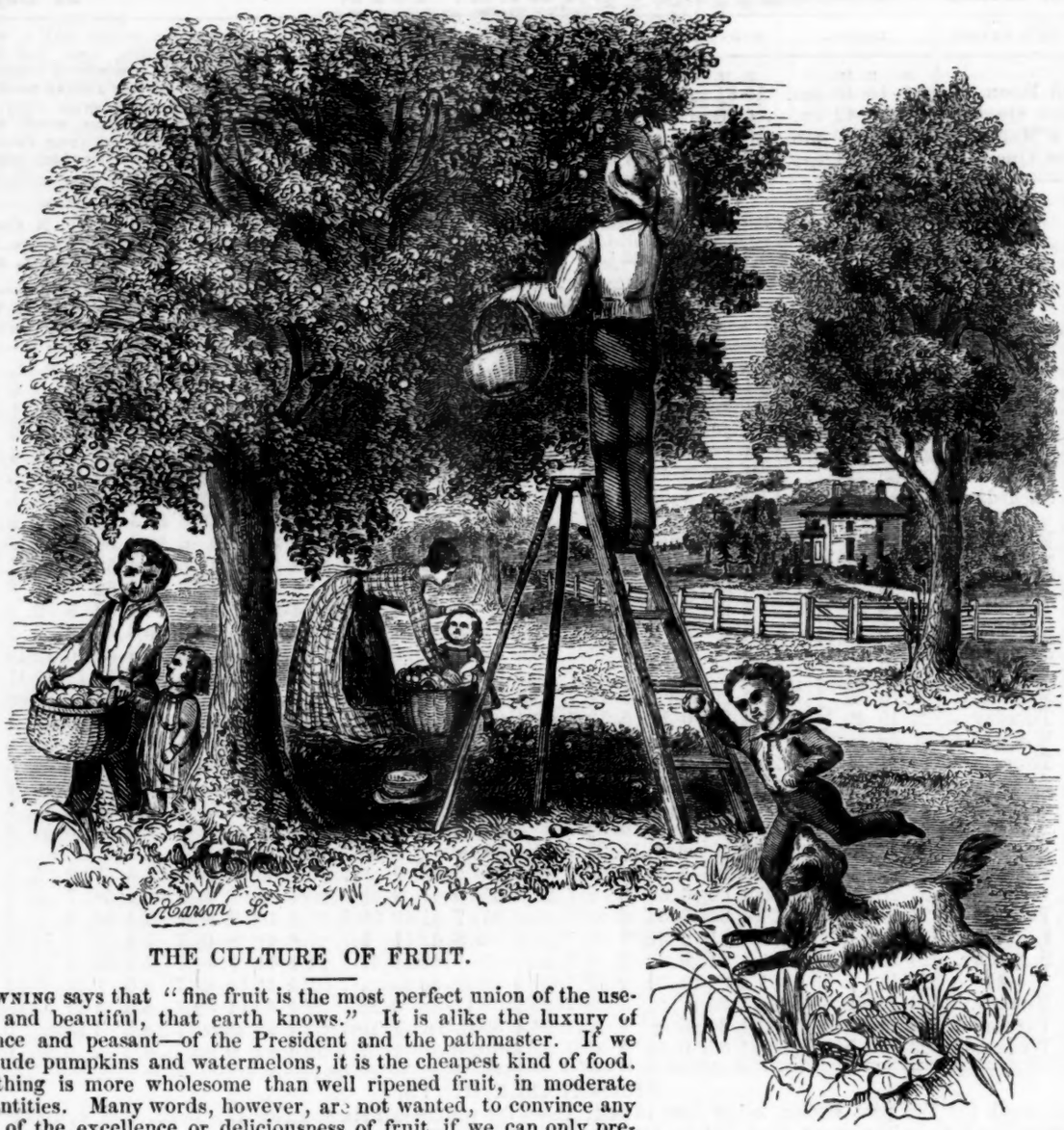
Letters addressed to LUTHER TUCKER, Editor Cultivator, Albany, N. Y., will be promptly attended to.



THE CULTURE OF FRUIT.

Downing says that "fine fruit is the most perfect union of the useful and beautiful, that earth knows." It is alike the luxury of prince and peasant—of the President and the pathmaster. If we include pumpkins and watermelons, it is the cheapest kind of food. Nothing is more wholesome than well ripened fruit, in moderate quantities. Many words, however, are not wanted, to convince any one of the excellence or deliciousness of fruit, if we can only present him a dish of apricots, or a quart of strawberries and cream.

Economy of Fruit.—Every manwho keeps a good supply of stewing and baking apples, of his own raising, saves a great many hard dollars yearly, otherwise to be paid to the miller or butcher. Or, if he raises his own meat and grain, an equal amount is thus reserved for market. Then, what a valuable addition to the comfort, variety, and luxury of the table! By the first of summer, the thick trusses of strawberries begin to redden in the sun; and half a dozen quarts of this melting crimson fruit may be had each day for the table, from as many half-rod beds. Cherries, currants, and raspberries, continue through the first half of summer, followed by early, juicy apples; rich, bloom-dusted plums; golden, perfumed apricots; and buttery and melting pears.

Now, we do not say, as some most mistakenly remark, that this fine and delicious supply costs nothing after the trees are planted; for good fruit cannot be relied on, unless the ground is well cultivated and manured. But it does not cost half so much to cultivate an acre of fruit, as an acre of potatoes or corn; while the amount obtained is greater than either; and all ready for the table, without going through the process which the grain crop requires, of threshing, and winnowing, and grinding, and kneading, and baking.

By planting rich, high-flavored apples, for stewing and for pies, instead of poor and insipid ones, each family may save fifty or a hundred, or two hundred pounds of sugar annually, in sweetening and spices. A friend of ours finds it cheaper to buy good fall pippins for fifty cents a bushel, than poor sorts sold as "cooking apples," for fifteen cents a bushel. He uses the Talman Sweetings largely, for baking and for puddings, and thinks that an Indian apple pudding, made by this natural sweetening, the cheapest and best pudding in the world. He estimates that he saves from $75 to $100 annually in the cost of his table, by his fruit.

Fruit for Market.—The man who wishes to make a business of marketing fruit, and obtain a regular yearly income, must plant many kinds. Some kinds will succeed best this year, and others next. An acquaintance in western New-York sold, in 1849,-twenty-five hundred dollars worth of peaches from about 12 acres. Fruit was scarce that year, and peaches sold at a high price. A large cultivator of the grape, on the Hudson, sells sometimes $5000 or $6000 worth of grapes. Richard J. Hand, of Monroe co., N. Y., sold in 1845, $440 worth of Northern Spy and Roxbury Russet apples from *one acre*. Now, a *general assortment* of the best kinds of fruit, will be likely to furnish every year, with good culture, one or more highly profitable crops.

THE CIRCLE OF FRUITS.

ARE our farmers—or such of them as have abundant means for this purpose—supplied with good fruit during the whole twelve months? Is there any one commodity, more calculated to increase the pleasures of the country, and to render home attractive to young people, than fine, ripe, fresh fruit, of one's own raising, during the entire season?

Burr's New Pine.

Many have adopted a very erroneous opinion, and suppose the "fruit season" to be a small portion of the year. A good selection would extend the period of actual bearing and ripening in the open air, to nearly six months; and such kinds as possess keeping properties, if in sufficient quantity, would supply the other six. The first fruits ripen, even so far north as Albany and Rochester, by the first day of summer, and two weeks earlier at Philadelphia and New-York. Three varieties of the cherry—the Early May, May Bigarreau, and Early Purple Guigne—mature simultaneously with the Duke of Kent and Large Early Scarlet Strawberries; a host of other fine varieties of both these kinds immediately succeed them. Currants and Raspberries soon join the list; the Primordian plum, the Amire Joannet and Madeleine pears, and several delicious apricots are on hand by wheat harvest. After which the profusion of peaches, pears, apples, plums, grapes, &c., furnish the richest supplies through autumn. Grapes and pears may be kept till spring, and apples till the succeeding summer. But, let it be remembered, that if the *long-keepers* are not laid in in very liberal quantities, the stores will soon be exhausted.

Red Antwerp.

The loss by unavoidable decay, as well as by consumption, must be allowed for An excellent mode of keeping winter and spring apples, in the absence of a better, was this: "Lock them up in a cool, dry cellar, and hide the key." The error was in the limited supply; its correction, is to supersede the necessity by an abundant store. Every cultivator, therefore, while he plants liberally of the earliest ripening varieties, must plant still more liberally of long-keepers; for while the former are soon succeeded by others, the latter must extend their benefits through a long and otherwise dreary period.

Dwarf Pear Tree.

RAISING QUINCES.—A correspondent of the HORTICULTURIST, who raises this fruit of extraordinary excellence, pursues the following course: He selects good, deep, dry, rich soil, which is deepened by a thorough use of the subsoil plow, and manure applied copiously and deeply, by dropping it in the bottom of each furrow as the plowing proceeds. Large and deep holes are dug for the trees; each receives half a barrel of good compost; the branches are shortened one-half, before setting, and the soil well settled among the roots by drenching with water before the hole is quite filled. All fruit trees, by the way, should receive this good treatment. He does not lose one tree in a hundred, by this excellent practice.

The pruning is given in autumn, and consists of cutting out, as sparingly as possible, and only old, crooked, crowded, and decayed branches. Every autumn, manure is spread round each tree, and after a light plowing in spring, salt is spread broadcast at the rate of ten bushels per acre. The salt is regarded of very great consequence, but it must be applied in connexion with free manuring every year. The ground is kept mellow and clean by constant cultivation, potatoes, sugar beets, &c., being found well adapted to the purpose. The principal secret of success, it will thus be perceived, consists in cultivating and doing every thing in the best manner; while others, who do not succeed, do not cultivate their trees at all.

Black Prince.

The writer states that a good crop of quinces may be obtained three years after transplanting, and the trees will continue in a productive state thirty years.

RASPBERRIES.—These should be pruned as soon as the surface of the ground becomes thawed in spring. All the old stems, and all the smaller young shoots, should be cleared away to the ground, and about half a dozen of the largest stems of last year's growth left for bearing. Their upper extremities, for a foot or two, should be cut off, being weak and useless, and detrimental, from their weight and shade. The remaining stems, if not of a stiff and upright variety, should be loosely tied to stakes.

Fastolff.

HARDY GRAPES need pruning early, before the sap flows and *bleeding* commences. A moderate bleeding need not be feared, but if profuse, it is detrimental. The sooner the work is done in the spring the better. The Isabella, Bland, Catawba, and other American varieties, are of such rampant growth, that when only a few years old, they bear most abundantly, and hence the inexperienced cultivator concludes that pruning is not necessary, and that they do better without it. A most erroneous conclusion—for the vines by such neglect, soon become a mass of thickly matted stems and branches, their vigor is exhausted, and diminutive crops of poor fruit are the result. But by good pruning they may be kept in perennial vigor and undiminished productiveness.

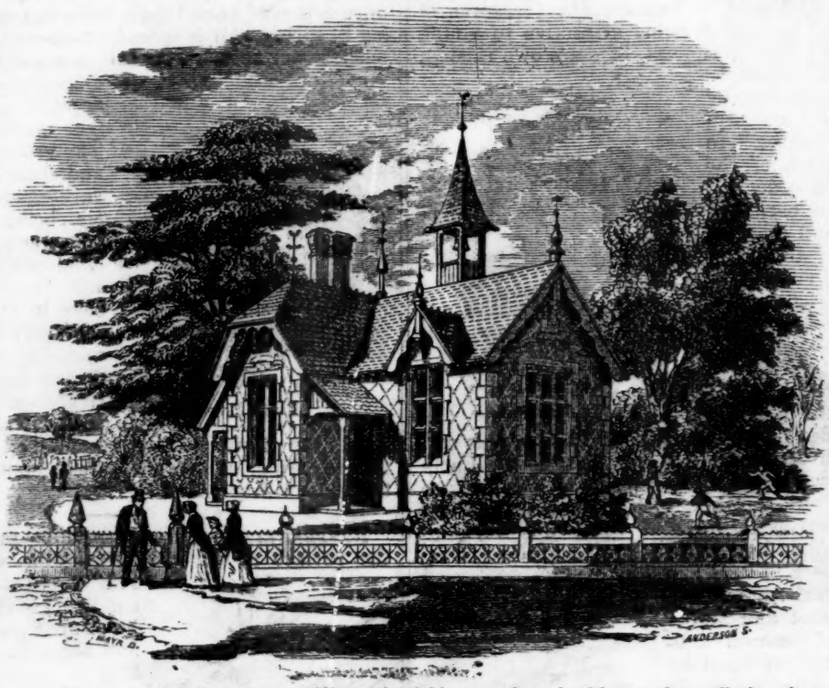
Spur pruning.

CULTIVATING DWARF PEARS.—Every intelligent fruit raiser is aware of the necessity of cultivating and manuring the soil well, for dwarf pear trees. S. B. Parsons states that he has 1700 trees on four acres—that he applied to this orchard last spring, $150 worth of manure, and gathered in the autumn 275 bushels of potatoes, 30 tons sugar beets, and a large quantity of turneps and cabbage—paying the expenses of manure and cultivation, and giving the pear trees a vigorous impulse.

FRUIT TREES which lack vigor of growth, should be stimulated with a good coating of old manure, spaded in as soon as the frost leaves the ground. Soapsuds is good for any tree, and especially for the peach.

DESIGN FOR A COUNTRY SCHOOL-HOUSE.

The accompanying design is copied from that exceedingly interesting magazine, "The Horticulturist." The editor remarks, very justly, "The district school-house, which ought to teach youth lessons of order and beauty, as well as the 'fundamental branches" usually taught there, is perhaps the only public building in the country which exhibits utter neglect.* In N. England, this reproach is fast passing away, and public school-houses, admirably designed, well arranged, warmed, ventilated, and fitted up in an excellent manner, are to be found in the neighb'rhood of many of the larger towns." The design here given is a reduced copy from a design in Kendall's work on Schools and School-Houses, published in London. It represents a small school-house, in a style admirably suited to harmonize with rural scenery. Built of stone, its cost is estimated in England at £270 but might be built of wood for half that sum. Even if not exactly copied, we think this design would afford some excellent hints. We do not see why it would not, in its exterior, have an agreeable effect if adopted for a small country meeting-house; it would appear far better than many as now built.



* We once heard a traveler remark that he found no difficulty in picking out the school-houses from all the other country houses in a large part of New-York State, for they were the very worst, most dilapidated, and most unadorned houses in the neighborhood!

KITCHEN GARDENING.

Asparagus.—It is a fine thing for this plant to have rich beds of soil and manure, two feet deep, for the roots to run in. But one great reason that asparagus does not grow larger is, the plants are placed *too thickly together* in the bed. Rows a foot apart will not answer—they should be two feet at least.

Any one may satisfy himself on this point by planting two beds as follows: One to be two feet deep, with soil and manure well mixed together, and the rows a foot apart; and the other a richly manured soil one foot deep, with the rows two and a half feet apart. In four years, the latter will furnish altogether the largest stalks. But if the bed is both deep and the plants far apart, the stalks will be larger than either.

The nearest possible distance admissible is a foot in the row. In a trenched bed four feet wide, only two rows should be allowed, two feet apart, and the plants alternating, (not opposite) thus giving more space between them, as in the following diagram:

* * * * * * *
* * * * * *

To raise early Cucumbers.—Place pieces of inverted *turf* just beneath the surface of the soil in a hotbed, and on these plant the seed. As soon as the time for spring frosts has passed, lift out carefully the pieces of turf with the growing plants, and place them in highly manured ground, where they are to complete their growth. No check is given to their growth by this removal. If there appears afterwards any probability of a night frost, cover them with a bell glass. Cucumbers have been thus raised for the table by the first of summer.

Early Lettuce.—The cheapest and best way to have very early lettuce, is to sow the seed early in autumn, in very rich ground, and protect the young plants during winter with a frame and strong glass. If *light* is not admitted, the lettuce will die. The white head lettuce is best for this purpose.

If a few of the plants are set in a botbed in the spring, they will come forward very rapidly—but without the hotbed, the crop will be as early as in a hotbed with the usual management.

Melons and Cucumbers.—A common error is to plant the hills too closely—six feet apart is about the right distance. Another error, is too many plants in a hill. A dozen will do till they are beyond the reach of "the bugs," but never more than *three* after the runners start. Cobbett used to say, "You will have more cucumbers from one plant in a hill than from two; more from two than from three; and so on till you get up to fifty, when you will have none at all!"

Millinet boxes are the best security against bugs.

Remember that high and heavy manuring is very important for these crops—and let all the manure be thoroughly mixed up with the soil. One of the heaviest crops of melons ever raised, was watered every alternate day with a liquid made of the cleanings of the henroost mixed with water, and soaked until the water fermented. Half a pint was poured on each hill at a time, and the offensive odor drove away nearly all the bugs.

Early Potatoes.—By sprouting seed potatoes about two inches long in a warm place, early in spring before planting, taking care not to break the sprouts in covering, the writer has had potatoes four to six inches high, by the time that others came up, planted in the usual way without the sprouts being started; and they have maintained this advantage till maturity.

Flat Turneps.—The difficulty of obtaining fine crops of this root, on clayey soils, has often been noticed. A neighbor succeeds finely in all cases by the following mode: He spreads old straw over the surface, and burns it, which destroys the insects, improves the soil, and gives it a coating of ashes; then sows his seed. A good crop always results. A good crop of turneps may often be had, with almost no cost, by sowing the seed among potatoes, at the time the latter receive their last hoeing.

The Cabbage Grub may be entirely excluded from the young plants, by rolling the stem in a piece of paper.

MANAGEMENT OF POULTRY.

We know of no one who has better described the advantages as well as the evils of poultry, as commonly allowed to run at large, than Prof. Turner, of Illinois, in Downing's Country Houses. He remarks: "Every householder knows the value of good fresh eggs, and an abundance of good fat poultry the year round. But few know how to obtain them without having them cost twice as much as they are worth. A hen is much like a fire-brand—a fine thing in the right place—but the worst of all things in the wrong place. Like the harpies of old, they are sure to defile all they do not destroy. But with proper conveniencies for managing them, they are among the most agreeable, profitable, and useful objects in country life.

To children, especially, fowls are objects of exceeding interest, and form an almost necessary part of the means of developing the moral and industrial energies of a country household. See that little fellow toppling along with his cap full of eggs for 'mamma,' or patting his favorite chicken on the back. He who will educate a boy in the country without a 'chicken,' is already a semi-barbarian; and he who leaves his chickens to make a hen-roost of all things, sacred and profane, visible and invisible, is still worse; to say nothing of the good housewife's flower patch in the garden, the very mention of which excites no small fear of a shower of oven brooms and brick-bats, while the whole welkin rings again with the discordant 'shew there! shew there!"

On large farms, where the barns and stables are remote from the house, carriage-house, garden, &c., hens may be kept with very little trouble. If not very numerous, little inconvenience will be experienced in permitting them to run at large. They should be excluded from the grain, and suffered to eat refuse grain, weed seeds, and scatterings. But they must not be allowed to roost on the plows, sleds, horse-rakes, nor any other tools which may chance to be housed in any other part of the barn, but be specially provided with a sleeping apartment. It will be much cheaper than to build a separate hen-house, to devote a portion of the upper story of the barn to an apartment for their use, which should, as an indispensible requisite face the south. It should be well lighted with glass windows, protected by wire gratings—the windows to be thrown open in summer.—The partitions should be studded and double, and filled in with tan, sawdust, or ashes, to secure warmth in winter. Rough poles for roosting should be placed overhead, with a sloping board roof immediately under, extending part way across the room, to receive the droppings, which are easily scraped down into a basket. This apartment is ascended by a small flight of steps, which the hens will soon learn to travel, if they receive a part of their food for a time in feeding boxes above. Where it has been found necessary to confine them to a picketed or wired hen yard, instead of allowing them unlimited range, a covered way of light lath work, extending directly from the apartment, in a sloping direction to the yard, at some rods distance, has been found to answer the purpose completely.

Colic in Horses.—External remedies, as well as internal, should not be neglected. One of the best external applications is turpentine, applied freely.

HINTS FOR NURSING THE SICK.

1. Let the nurse help the patient in giving an account of himself to the physician.

2. Make it a point of conscience to follow punctually all prescriptions—if the patient is placed in the physician's hands, let not the nurse thwart his aims by assuming to know best.

3. Wear a cheerful countenance, and be gentle and noiseless.

4. Never burden the sick with unnecessary attentions, nor allow him to suffer for want of care.

5. Attend strictly to and prevent every little annoyance, which a well person would not heed, as slamming doors, treading heavily, talking too much, or leaving articles displaced in the room.

6. Use great care to prevent colds or chills in changing beds or linen. Let linen be well aired and warmed. Place a warm blanket or shawl round the shoulders when sitting up in bed. Smooth the pillows, straighten the bed clothes, and keep every thing as neat, comfortable, and refreshing as possible, to the weary sufferer.

7. During night, let the nurse keep well wrapped in warm dress—use food as a substitute for sleep—and place every thing handy, so that little movement or noise shall be needed.

8. Feverish patients are greatly refreshed by a frequent sponging in tepid water, in which a little salæratus has been dissolved, which tends to soften the skin.

9. In dressing a blister, have every thing ready, that it may be exposed as short a time as possible to the air.

10. Give fresh air on every practicable occasion.

11. Let every thing, dishes, medicine, glasses, and all else, be kept clean.

12. Bear patiently every infirmity of the sick—and remember that it is much better to be the *nurse* than the *patient*.

False Economy.—The American Agriculturist estimates there are ten farmers who waste $50 annually in manure, where there is one who pays a dollar for an agricultural paper, which would show him how to save it.

PORK MAKING AND PORKERS.

Every farmer, almost, is anxiously inquiring whether he can really afford to raise and fatten hogs at the prices he gets. And then again, we hear different persons deciding with a great deal of precision, exactly what it costs to raise pork under any circumstances. Now, we happen to know, from our own experience and observation, that while it actually costs some men a shilling a pound, York currency, others will do it for one quarter of that sum. Would it not be interesting to know the reasons of this difference?

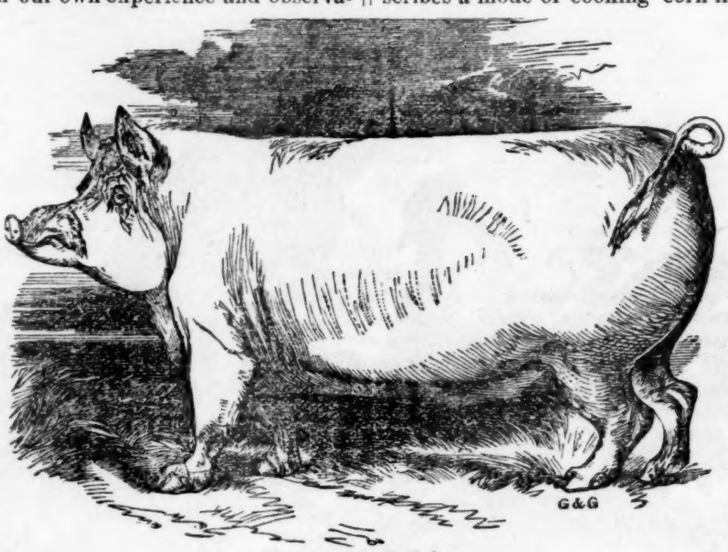


Fig 1. *The Suffolk.*

First, in the *breed*. Some breeds of hogs will yield more than twice the amount of fat and flesh for the food consumed, than other sorts. In other words, they convert a much greater portion of the corn to useful purposes, and let but little of the nutriment escape.—The China, Berkshire, or the Suffolk, for instance, (fig. 1,) economize the food they eat, much better than those sorts which approach the Landpike in form, (fig. 2.) Our own experience satisfies us that Berkshires, or even good half-blood Berkshires, would make as much pork out of a hundred bushels of corn, as a majority of the hogs raised in the country would out of two hundred bushels. Thus, without any increased cost, except the trouble of getting the right sort, the farmer who has his wits about him actually saves, clearly and completely saves, five hundred bushels out of every thousand he feeds out. No wonder that some men get rich while others grow poor. Another great saving is made by *cooking* the food. But, to set a large kettle in a common brick or stone "arch," may hardly pay for the fuel consumed. Economy in *fuel*, as well as in corn, must not be forgotten. Mott's Agricultural Furnace, described on a previous page, is one of the best things for cooking with little wood. A hogshead, as a steamer, placed closely over the boiler, would probably be an additional improvement. It does not seem to be essential that the corn should be ground, except that it cooks in less time. Prof. Turner describes a mode of cooking corn in the ear by steaming, so economical of labor and fuel, that he asserts the labor of steaming to be actually less than feeding dry corn in the common way. We can only give a very meagre outline of his plan. A *steam vat* is made at one corner of the hog-house, 5 feet square and 10 feet high, of a double stud partition, with dry clay rammed in closely between, being done while the boards are nailed on from bottom to top. In the bottom of this vat, there is a barrel or box, open at top, with clay also rammed all round its sides, which is made to serve as a boiler, by means of a sheet iron or sheet copper pipe, (copper is best) 8 inches in diameter, running through the sides of the box in a horizontal direction. The fire is built in this pipe, and heats the water on every side. The further end of this pipe is closed, but a smaller pipe, 3½ inches in diameter, runs upward as a fire flue. A cover with wooden holes lies over the boiler, and through these holes the steam ascends into the vat, which will hold about 30 bushels. Corn is shovelled in at the top, till about two-thirds full. It is then covered tight, and a fire is built. The steam rises through the cover, and a part is condensed and falls back into the boiler; the corn swells and fills the whole vat. The boiler is supplied with water occasionally through a tube. When the corn is steamed enough, it is let out with ease through a door near the bottom, on the floor or into a self-feeding trough, where the pigs obtain just what they want and no more.

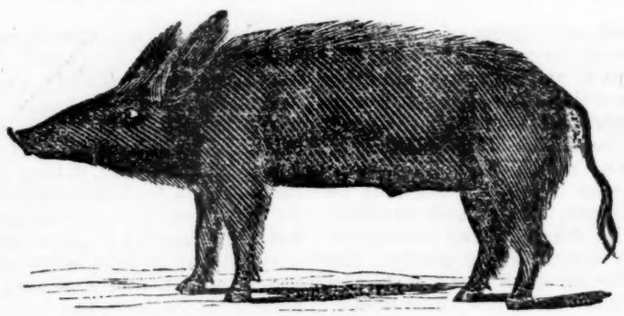


Fig. 2. *The Landpike.*

After feeding corn in this way, an occasional change to dry food is useful. Some farmers have found a great saving in cooking their refuse or second-rate apples with corn. Others have made pork very cheaply by allowing their hogs the run of the orchard through autumn, finishing the last two or three weeks with corn.

A great deal is often lost by not providing comfortable quarters for hogs. A pig is not essentially a dirty animal—he does not plunge into a pool of muddy water because he has a fancy for it, but a cool bath he wants, and will have, at whatever cost. He will thrive and fatten faster, if kept clean and comfortable, according to careful experiment.

Root Crops and Weeds.—Many farmers are deterred from raising ruta bagas, carrots, field beets, &c., by the labor and expense of hoeing and destroying weeds, although these crops often yield from 500 to 800 bushels to the acre. To avoid all this trouble, begin early in the spring, if for ruta bagas; and the year before, if for carrots or beets, and by repeated plowing and harrowing, clear the ground effectually of weeds. This will save much labor. Then, when the young plants are up, hoe them *at all hazards*, by the time they are an inch high. This will require about one-fifth of the labor needed two weeks later, or when the weeds are a foot high.

Potatoes.—To clear these of weeds, where they are planted in drills, pass a fine-toothed harrow over the whole surface, just before the potatoes are up, which mellows the soil and destroys the young weeds. When up, plow *from* the plants; then a light furrow towards them, leaving the hills or ridges *broad*.

Gates.—Every gate should be kept in good, self-shutting, self-latching order. A hole should be bored in the post of every gate, and filled with grease, for readily applying to the latch or hinge, when the one does not play freely, or the other creaks.

WIRE FENCES.

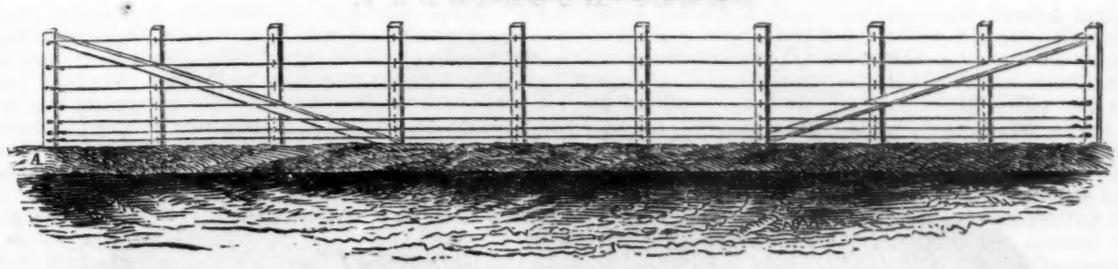


Fig. 1.

Wire fences are attracting much attention in all parts of the country. When they have failed, it has usually been owing to poor iron or too small wires, in endeavoring to make them cheap. Where stone for walls, or timber is scarce, they may prove valuable. Col. Capron, of Maryland, made two-thirds of a mile in one entire piece, stretching the wires the whole length between two stout main posts, the wires being supported by intermediate posts 8 feet apart. The main or end posts must be firmly braced, as in the above figure. Col. Capron used No. 5 wire next the road, weighing one pound to 8 feet, and costing about 70 cents per rod for 6 wires. He thinks No. 7 wire, weighing one pound to 11½ feet, will do for partition fences. Some use No. 10 wire, which is about 24 feet to the pound, but it is liable to become broken, except under unusual circumstances. A wire fence, patched with rails and boards, as we have often seen, where small wire was used, is not a pleasing object. The wire must be annealed.

The wire passes through the end posts, and may be fastened to the intermediate posts by staples, made as follows: wind a wire closely round a flat iron bar, passing from one end to the other; then with a cold chisel cut the wire along the middle on both sides, which will both flatten and sharpen the newly made points. Gas tar will prevent the rusting of the wires, but being so black will make them very hot in the sun, and they will lengthen and contract more by heat and cold, than if painted with yellow ochre. Col. Capron keeps his wires always equally stretched, by means of a 150 pound weight, acting on a lever at one end. His two-thirds of a mile of wires, by expanding and contracting, cause this weight to rise and fall about thirty degrees.

Before using, the wire should be wound on a large cylinder, which may be attached to a wheelbarrow. The ends are looped together thus, (fig. 2,) or if large,

Fig. 2.

by flattening each end, and then binding them together with small annealed copper wire. It is tightened in the main posts by means of screws passing through the posts by turning a nut, (*a*) as in the annexed cut, (fig. 3;) the wire having been drawn tight and keyed in the previous post, braced for this purpose. Square headed, iron bed-screws, may be bought cheaply by the dozen, and the ring or hook welded on by a blacksmith. In making the fence, the hands must be protected by thick leather mittens.

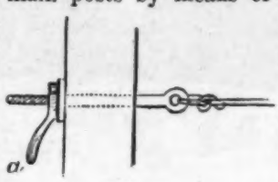


Fig. 3.

If a riage is thrown up by two furused, seven wires will be enough in all rows at bottom, or a bottom board cases, at the following distances apart: 4½ inches, 4½, 6, 7, 8, and 9. In secluded or unexposed places, wire fences, with small wires, have been made for fifty cents per rod; but a good substantial one can not be made for much less than one dollar per rod, and some have cost considerably more.

GOOD RULES AND GOOD MANAGEMENT.

One of the best farmers in the State of New-York, has the following rules and regulations agreed to and signed by every man he hires.

It is expected that all persons employed on the farm of —— ——, will carefully attend to the following system:

Regularity in hours.
Punctuality in cleaning in putting away implements.
Humanity to animals.
Neatness and cleanliness in personal appearance.
Decency in deportment and conversation.
Implicit obedience to the proprietor and foreman.
Ambition to learn and excel in farming.
No liquor or strong drink of any kind to be allowed.

MAXIMS OF ORDER AND NEATNESS.

1. Perform every operation in the proper season.
2. Perform every operation in the best manner.
3. Complete every part of an operation as you proceed.
4. Finish one job before you begin another.
5. Secure your work and tools in an orderly manner.
6. Clean every tool when you leave off work.
7. Return every tool and implement to its place at night.

Experiment with Ashes.—A correspondent of the New-England Farmer, spread "on a small square of a few rods," ten bushels of ashes, on worn-out meadow. "The grass there was three feet high, while all around, with equal advantages, except ashes, it was hardly five inches high in July."

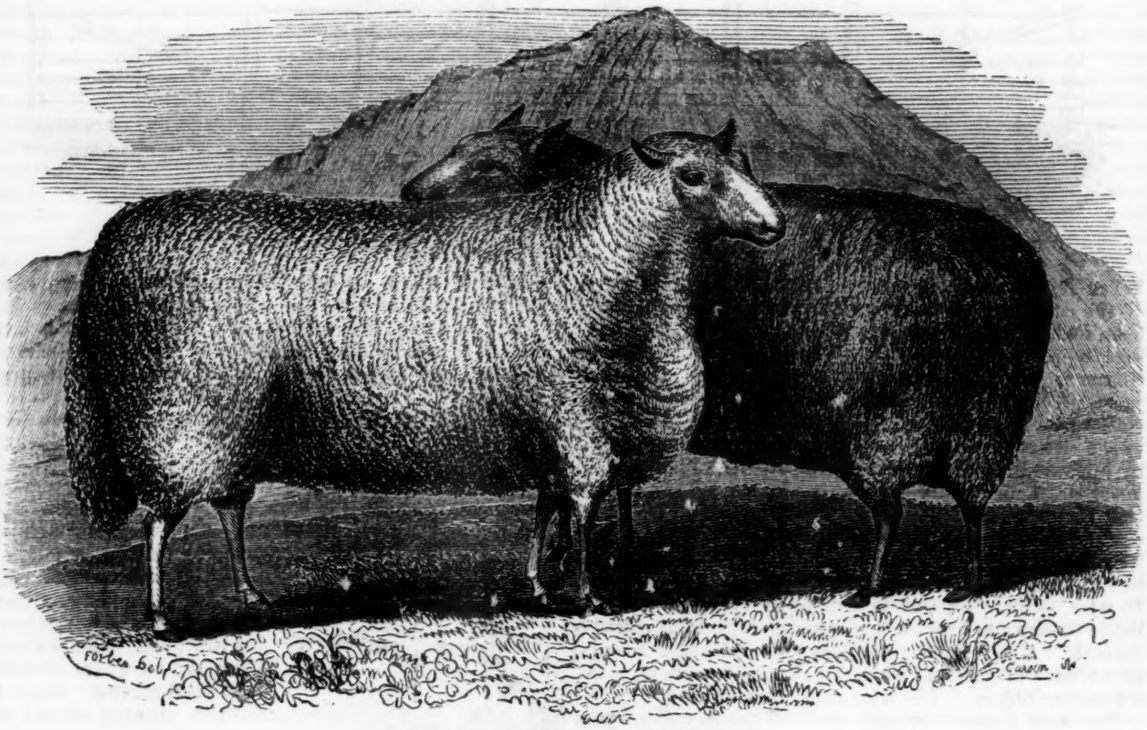
Draining Land.—Many persons mistakenly suppose that it is not necessary to drain land in a dry climate. A want of draining is often the reason that land suffers from drouth. When water-soaked early in the spring, it cannot be well plowed; or if plowed, it is worked into mud and bakes hard. But if well drained, it may be plowed early and deeply; and being thus made deep and mellow, it retains moisture through the summer.

A crop of oats or barley is some times one-half larger merely in consequence of being put in a fortnight earlier on well drained land, that can be worked at all times. Trying to farm well without draining, is like beating up stream against the wind—every thing tends to baffle the husbandman.

Draining on a Large Scale.—Prof. Norton, of Yale College, visited a farm in Scotland; the surface of the soil was stiff, and the subsoil a close clay. The owner had drained 900 acres, with a length of drains equal to 300 miles. He had a machine for making tiles for his drains, which turned out 400,000 a year. The rent of the land was immediately raised by this improvement, from $2.50 to $6.50 per acre.

Draining in Western New-York.—A field of several acres in Cayuga county, was so wet that it scarcely produced eight bushels of wheat per year. It nevertheless contained a very fertile soil, but its fertility was locked up and rendered useless by being submerged in cold water during an important part of the year. The owner run under-drains through every part, and the first crop of wheat after the operation, was *forty* bushels per acre.

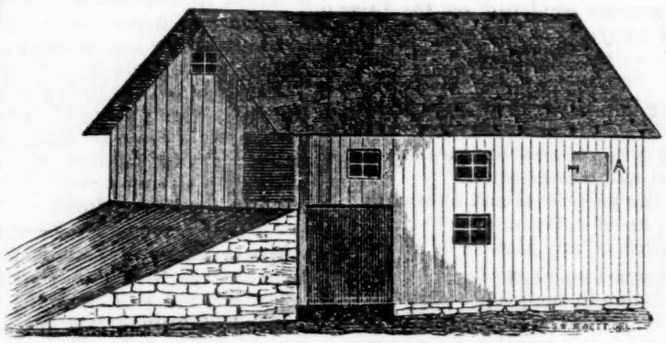
SHEEP HUSBANDRY.



THE CHEVIOT BREED OF SHEEP.

This is a breed, as yet nearly new in this country. In Scotland, they have the reputation of being remarkably hardy, and thriving under apparently very adverse circumstances. They yield on an average 5 lbs. of long wool, washed upon the back; ewes at five years have weighed 60, 70, and even 90 pounds—and some wethers 200 pounds. They promise to be an excellent breed for mutton. Their introduction and trial seem very desirable, especially in a country like ours, where there is such a diversity in climate, soil, and aspect, as well as in the various demands for long and fine wool, mutton, &c.

Two-story Sheep Barn.—These are made so as to have two floors under one roof, thus doubling the accommodations, with a small increased expense in building. A shed, (adjoining a hay barn) 18 by 26 feet, with 13 feet posts, will furnish room for two flocks of sixty each, including the space for feeding boxes. The annexed figure represents one large enough for hay at one end. It is 25 by 34 feet, with 12 feet at the right end for hay. Where rising ground cannot be had, a raised ascent, as in the cut, is made for entering the upper story. The upper floor should be matched, to prevent the liquid manure from dripping through on the sheep below. The basement has double doors, so as to admit backing in a cart or sled. A folding plank is opened in the upper floor, through which the manure is passed in loading. The hay is pitched in through the door at the right.



Shelter for Sheep.—L. A. Morrell, one of the best sheep raisers in the United States, has found that he saves a ton of hay for every hundred sheep, by good shelter. He found that the increase in the amount of wool was 1,250 lbs. in four clips. The increased number of lambs exceeded a hundred a year.

Throw the whole into figures:

One thousand sheep, as commonly wintered, cost a dollar per head, or		$1,000
One-third of this saved by shelter, is,	$333	
Fifty sheep saved in the 1,000, $2 each,	100	
Increased weight and increased value by shelter, one-tenth of the whole,	200	
Increase in fleece, say 160 lbs.,	60	
Increase in lambs, say 60,	50	
Total,		$743

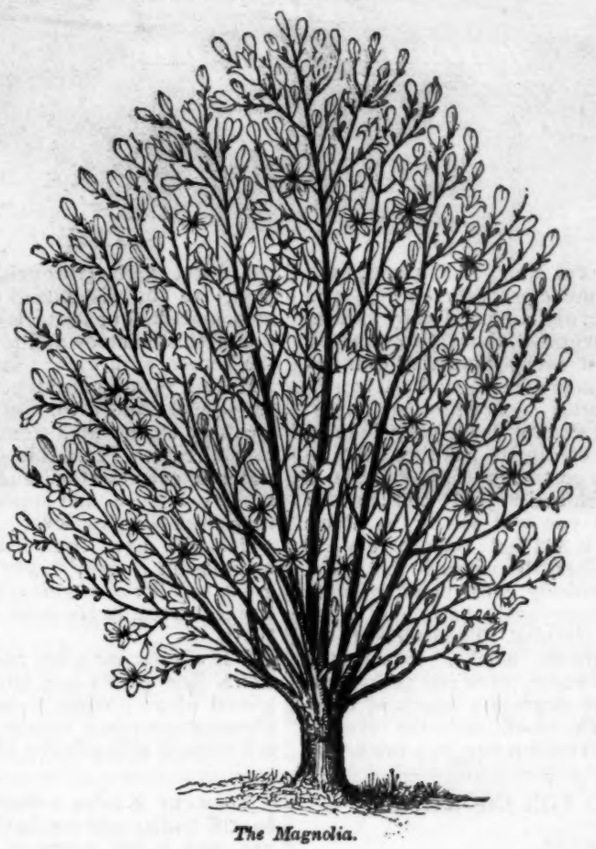
This estimate is founded on an actual trial, and the amount would amply pay *every year* all cost of suitable sheds—not counting the comfort and satisfaction of seeing the animals live and thrive—nor the comfort of knowing that one is practicing good, instead of bad farming.

The Age of Sheep.—The age of sheep may be known by the front teeth. They are 8 in number, and appear the 1st year, all of a small size. In the 2d year, the 2 middle ones fall out, and their place is supplied by new teeth, which may be easily distinguished by their larger size. In the 3d year 2 other small teeth, 1 on each side, fall out, and are replaced by 2 larger ones; so that there are now 4 large teeth in the middle, and 2 pointed ones on each side. In the 4th year, the large teeth are 6 in number, and only 2 small ones remain, 1 at each end of the range. In the 5th year, the remaining small teeth are lost, and the whole front teeth are large. In the 6th year, the whole begin to be worn; and in the 7th year, sometimes sooner, some fall out, or are broken. It is said that the teeth of ewes begin to decay at five or six; those of wethers at seven, and those of rams at eight. Sheep sometimes continue strong and productive until fourteen or even sixteen years old, and occasionally longer.

SHADE TREES.

Prof. Wilson, in Blackwood's Magazine, asks: "In what one imaginable attribute, that it ought to possess, is a tree, pray, deficient? Light, shade, shelter, coolness, freshness, music—all the colors of the rainbow, dew and dreams dropping through their umbrageous twilight at eve or morn—the grove, the coppice, the wood, the forest—dearly, and after a different fashion, do we love you all! And love you all we shall, while our dim eyes can catch the glimmer, our dull ears the murmur of the leaves—or our imagination hear at midnight, the far-off swaying of old branches groaning in the tempest."

And yet with what animosity is every fragment of our wild, rich, natural plantations assailed by the new settler; till nothing is left to shelter the newly erected dwelling from the burning, bleaching sun—and how many of the older homes, which ought to be now richly embellished with these most perfect of all rural adornments, are repulsive from their bleakness; exposed to torrid reflection in dog days, and to drifting snows and whistling winds at midwinter. And yet all the endless intermixture of intricacy, and beauty, and richness, and gracefulness, to say nothing of real, substantial comfort, may be had with scarcely more than the trouble of planting the trees, even under the most unfavorable circumstances.



The Magnolia.

Why should not every settler and land-clearer be willing to leave a few of the best selected maples and lindens, ashes and sycamores, elms and birches, among the forest myriads which fall before his axe, to make an attractive home for his children, even if he should forget that a handsomely adorned dwelling would give him a higher price for his land? And why will not every land owner in the older districts be willing to plant at least ten trees per year for the same purpose? Half the time now consumed with reading the interminable debates of Congress, would be enough to change the whole appearance of the country in ten years, in half the States of the Union, to say nothing of the improvement on the manners and morals of the people.

A less wild, and more cultivated and finished appearance, is given to grounds composed chiefly of native trees, by intermixing a few of the finest exotics, or rarer natives. The Magnolias are much admired for this purpose. The accompanying figure is an exact portrait of a tree of the Chinese White Magnolia, fourteen years old, and twenty feet high, standing on the grounds of A. J. Downing, at Newburgh, N. Y. There were over three thousand blossoms open upon it at once; and for the last ten years it has never failed in a single season, to produce a fine display of blossoms.

Grapes.—Every farmer, and indeed every person who has a yard, and the side of a building on which it may be trained, should have an Isabella grapevine. In a few years it will furnish a plentiful supply of grapes.

COOKING FOR THE SICK.

Chicken, Beef, or Veal Broth.—Cut up the chicken, or an equal quantity of lean veal or beef, and boil with two spoonsfull of washed rice, until tender. Then keep it covered in a bowl or pitcher, for use. When wanted, add crumbs of crackers or cold bread, with a little salt. It is very palatable for a sick person.

Water Gruel.—Boil a pint and a half of perfectly clean water, in a perfectly clean vessel; add it gradually to a mixture of two spoonfuls of Indian meal in three spoonfuls of water, in a bowl. Then pour the whole back into the vessel and boil it nearly half an hour, stirring it. Skim it and season it with salt. When admissible, one quarter of milk added and boiled up once, makes it more palatable to some.

Arrowroot.—Add a teaspoonful of the powder to a tablespoonful of cold water, rubbing it smooth. Add a spoonful of warm water, and again stir it till perfectly smooth. Then pour on half a pint of boiling water, and stir it till transparent. It may be seasoned with salt, or lemon juice and sugar, or sugar and nutmeg, with a little milk.

Panada.—Split a Boston cracker, place it in cold water in a pint basin on the fire, with a dozen raisins. The moment it boils, remove it from the fire, and add two or three lumps of loaf sugar, and nutmeg, if desired by the patient. This is much better than to crush the cracker, and is one of the most agreeable and nourishing kinds of food for the sick. The raisins are only to impart flavor, and must never be eaten.

Toast Water.—Very few know how to make toast water right. Toast the bread carefully to a full brown, but not in the least burnt. If not enough toasted, it will taste raw; if too much, it will be bitter. Put it while hot into cold water, and it will be almost immediately ready for use. Boiling water renders it insipid.

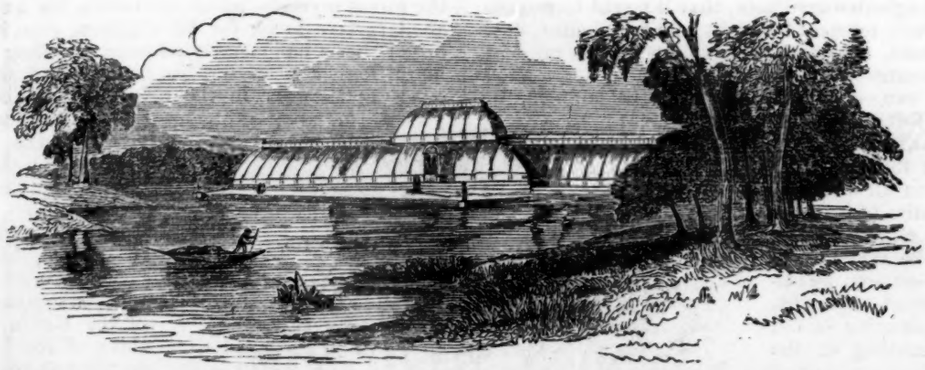
Beef Tea.—This is given to patients when very low, and has remained on the stomach when nothing else could, and succeeded when other means have failed.

Cut thin a pound of lean fresh beef, place it in a jar or bottle, add a little salt, and place it for one hour in a kettle of boiling water. Then, by straining it, a gill of pure, nourishing liquid will be obtained. Begin with a teaspoonful, and increase it as the stomach will bear.

Destroying Canada Thistles.—A great number of persons, the writer included, have *completely destroyed* large and thickly matted patches of Canada thistles, in one season, at a trifling cost, thus: Plow deeply and thoroughly once a month, beginning by the first of summer. The plants are thus kept smothered; they cannot breathe; and the whole bed of roots dies. At the last plowing, the soil will be clean, mellow and loose, and in the best condition for sowing wheat. Warranted not to fail, if well done—*the patch will be killed forever.*

Never feed a hog unground or uncooked food.

THE ENGLISH NATIONAL GARDENS AT KEW.



The Royal Botanic Gardens at Kew, in England, have been for the last ten years public property, thrown open for the benefit of the public, and augmented by various additions, till they now comprise about two hundred acres. They contain almost every thing that is interesting, and valuable, and magnificent, and extraordinary, in the vegetable world. Among other things, they have over twenty glass structures for plant houses, the largest of which is the enormous building containing the palm trees, which cost about $200,000. It is thus described in the Horticulturist: "It consists of a centre and two wings, (as you will see by the above figure.) The whole length is 362 feet; the centre is 100 feet wide, and 66 feet high; and the wings 50 feet wide, and 30 feet high. It is entirely constructed of iron, stone, brick, and sheet glass—not a particle of wood being about it. The roof is circular. The iron posts are inserted in great Cornish granite blocks. It is heated by 12 furnaces, and by hot-water pipes and tanks, carried beneath the floor. The aggregate length of these pipes is about five miles. The smoke from the furnaces is conveyed through a subterranean flue, in a brick tunnel, 6 feet high, (through which one may conveniently pass,) to the distance of about 400 feet, where an ornamental shaft or tower is erected, 96 feet high. In the top of this chimney and tower is a reservoir, to supply the houses with water; and at its base is a coal yard, and from this the coal is conveyed on a railroad through the tunnel alluded to. In the centre of the building is a gallery 30 feet high from the floor, ascended by a spiral staircase. From this gallery the plants are easily watered over the top; and the taller plants are more easily examined, and appear to much better advantage than from the floor level. It is really a charming sight which you have from this gallery, looking down on magnificent *Palms*, *Sugar Canes*, *Cocoanut Trees*, the great *Strelitzia augusta*, and many rare and beautiful tropical trees, in the most healthy and luxuriant condition.

"It affords one some positive idea of tropical vegetation. The plants are all in tubs, so that each one is placed where it ought to be, and can be moved about as circumstances may require. All the pillars in the house are clothed with climing plants of variety and beauty."

TIME REQUIRED FOR COOKING.

ROASTING.

Beef, large roasting piece,	4	hours.
medium roasting piece,	3½	"
Mutton, leg or saddle,	2½	"
shoulder or loin,	1½	"
Veal, fillet (or ham,)	4 or 5	"
loin or shoulder,	3 or 3½	"
neck or breast, nearly	2	"
Lamb, hind quarter,	2	"
fore quarter,	2	"
leg,	1¼	"
shoulder and breast,	1	"
Pork, leg,	3	"
thick spareribs,	2	"
thin spareribs,	1½	"
loin,	2	"
pig, 3 or four weeks old,	1½	"
Turkey, large to small,	1½ to 3	"
Goose, full grown,	2	"
young,	1	"
Duck,	½ to 1	"

Buckwheat Cakes, after standing to rise all night, are much improved by adding, just before baking, sour cream and salæratus—say a teacupful to a quart of batter. This makes them richer and lighter. Good for keen appetites on frosty mornings—and not bad for any other.

Corn Cakes.—Two teacups of buttermilk, one of sour cream, previously sweetened with salæratus, one tablespoonful of molasses, and Indian meal to make it nearly as stiff as muffins. Bake half an hour. Eaten with great *gusto* by those who have tried it.

Cooking Tomatoes.—The great error is in not cooking them *long enough*. They should cook slowly, and never for less than three hours.

To make Kisses.—Beat whites of three or four eggs to stiff froth; add one-half pound pulverized white sugar, and a few drops of essence of lemon. Of this, drop a teaspoonful on white paper, and place on buttered tins, and dry in a moderately heated stove. Cool and eat.

Raspberry Syrup.—To every quart of fruit add a pound of sugar, and let it stand over night. In the morning boil and skim it for half an hour; then strain it through a flannel bag, and pour it into bottles, which must be carefully corked and sealed. To each bottle add, if you please, a little brandy, if the weather is so warm as to endanger its keeping.

Raspberry Jam.—Take one pound loaf sugar to every pound of fruit; bruise them together in your preserving pan with a silver spoon, and let them simmer gently for an hour. When cold put them into glass jars, and lay over them a piece of paper saturated with brandy; then tie them up so as carefully to exclude the air.

Blackberry Syrup.—We are indebted to a friend for the following receipt for making blackberry syrup. This syrup is said to be almost a specific for the summer complaint. In 1832 it was successful in more than one case of cholera. To two quarts of juice of blackberries, add one pound loaf sugar, half an ounce nutmegs, half an ounce cinnamon, pulverized, half an ounce cloves, quarter of an ounce alspice, pulverized. Boil all together for a short time, and when cold, add a pint of fourth proof brandy. From a teaspoonful to a wineglass, according to the age of the patient, till relieved, is to be given.

Sausages.—The best proportions are 3 lbs. salt, 10 oz. sage, 10 oz. pepper, to every one hundred pounds chopped meat.

Eggs, wholly imbedded in salt, the *small end downwards*, will keep from one to three years, perfectly fresh.

ALDERNEY CATTLE.

The Alderney Cows have formerly been famed for three qualities—for producing exceedingly rich milk—for the smallness of their size—and for destitution of beauty in form. "Except in Hampshire," says Youatt, "they are found only in gentlemen's parks and pleasure grounds, and they maintain their occupancy there partly on account of the richness of their milk, and the great quantity of butter which it yields, but more from the diminutive size of the animals. Their real ugliness is passed over on these accounts; and it is thought fashionable that the view from the breakfast or drawing room of the house should present an Alderney cow or two grazing at a little distance."

This animal, although small, is a voracious feeder. The quantity of milk which she yields is never large, but its richness is unequalled, affording more butter than can be obtained from any other cow. There is an instance of one of these on record, which afforded nineteen pounds of butter per week for three successive weeks.

Within a few years, an association of farmers in the Island of Jersey, have made great improvements in this breed. By selecting the very best shaped animals to breed from, they have been able to raise a new race, greatly superior in appearance and in fattening qualities, to the old Alderneys, without lessening their milking properties. Some of the improved breed have afforded fourteen pounds of butter per week, and ten pounds being more common during the spring and summer months. The old stock appear to be scarcely hardy enough for our more northern States. The new sort appear not to have been yet introduced.

Milch Cows.—The value of milch cows is depending on several circumstances, such as the quantity of milk produced, the butter it will make, the time of going dry, and the gentleness of disposition, ease of milking, &c. It is not always the smoothest and handsomest cows that are the best milkers; on the contrary, a disposition to take on fat is rarely found combined with great milking qualities. In England, the Ayrshires are great favorites as milkers; but there, as here, occasional instances in all breeds are found, where large quantities of milk are produced. In this country, considerable discussion has taken place as to the respective milking qualities of the Short-horns and the native breeds, and an ample list of the best that could be selected on both sides, with the quantities of butter and milk produced, may be found in Mr. Colman's 4th Report. We select a few of both kinds, to show the immense difference there is in profit, between keeping good cows and poor ones:

Cow.			*Butter per week.*
Belina, ...	S. H.,	Mr. Powell,....	20½
Blossom,.....	S. H.,	Mr. Canby,....	17½
Oakes cow,.....	N. B.,	Mr. Quincy, ...	19½
Nourse cow,.....	N. B.,	Mr. Nourse, ...	20
Springfield,.....	N. B.,	Mr. Henshaw, .	21

What a Farmer ought not to do.—A farmer should never keep more cattle, horses, sheep, or hogs, than he can keep in good order; an animal in high order to the first day of December, is already half wintered.

Relieving Choaked Cattle.—If the potato or apple is near the mouth, (ascertained by feeling the neck) draw it out from above, by running the arm down and seizing it with the fingers, preventing the animal from biting by propping the mouth open with a plow clevis, held firmly by two men. A strong box, made on purpose, open at top and bottom, with projecting pieces to hold it by, is still better. The writer speaks from experience, having often thus drawn the potato from cows' throats. But when low down, it may be pushed into the stomach by means of a tarred rope an inch in diameter, with a ball of tow at one end as large as a hen's egg, bound with soft leather. A wooden rod of any kind is dangerous, and usually ruptures the gullet and kills the cow.

To Promote the Health of stock.—Mix, occasionally, one part of salt with four, five, or six parts of wood ashes, and give the mixture to different kinds of stock, summer and winter. It promotes their appetite, and tends to keep them in a healthy condition. It is said to be good against bots in horses, murrain in cattle, and rot in sheep.

Horseradish root is valuable for cattle. It creates an appetite, and is good for various diseases. Some give it to any animal that is unwell. It is good for oxen troubled with the heat. If animals will not eat it voluntarily, cut it up fine and mix it with potatoes or meal.

Feed all animals regularly. They not only look for their food at the usual time, but the stomach indicates the want at the stated period. Therefore feed, morning, noon, and evening, as near the same time as possible.

Guard against the wide and injurious extremes of satiating with excess and starving with want. Food should be of a suitable quality, and proportioned to the growth and fattening of animals, to their production in young and milk, and to their labor or exercise. Animals that labor need far more food, and that which is more nutritious, than those that are idle.

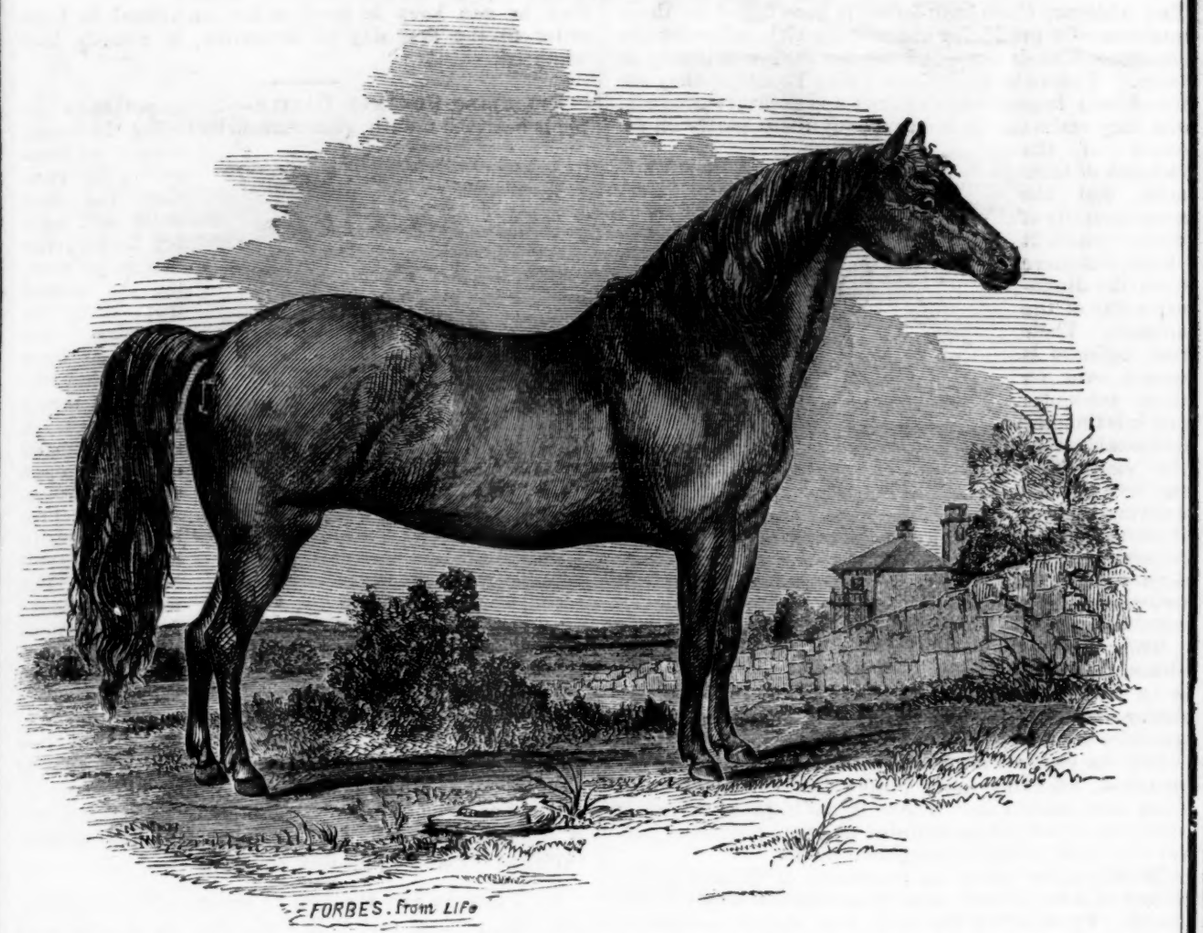
Guard all descriptions of stock against cold and exposure, especially against cold storms of rain, sleet and damp snow, and against lying out on the cold ground in cool nights, in the spring and fall.

In a dry time, see that animals have a good supply of pure water. When the fountains are low, they drink the drainings of fountains, streams, and passages of water, which are unwholesome.

If barns and stables are very tight and warm, ventilate in mild weather, even in winter.

In feeding animals on apples or roots, begin with a small quantity and gradually increase it. It would be better to have all changes in food made gradually, when there is a material difference in the nature of the food; as from hay to grass, and the reverse; from much fodder to much grain, and the reverse.—*Amer. Veterinarian.*

"LADY GIFFORD."



THE above cut is a good portrait of a mare bred by Mr. M. ALDRIDGE, of Wethersfield, Vt., and now owned by Mr. S. A. Gilbert, of East Hamilton, N. Y. Her sire was the well known horse "Gifford Morgan." She has great depth and capacity of chest, and remarkable muscular development, combined with justness of proportion, which gives her great bottom and power. She has naturally good action, and with mature age and proper training, will show speed enough to satisfy any *reasonable* man. She has great spirit and fire, but withal so much intelligence and gentleness, that a lady or child can safely drive her.

HORSES OF THE ANCIENTS.

THE purposes to which the Roman horse seems to have been most commonly applied, were those of war and the chariot race. Virgil's description of the war horse is particularly fine, and presents much of the liveliness and truth of a pictorial representation.

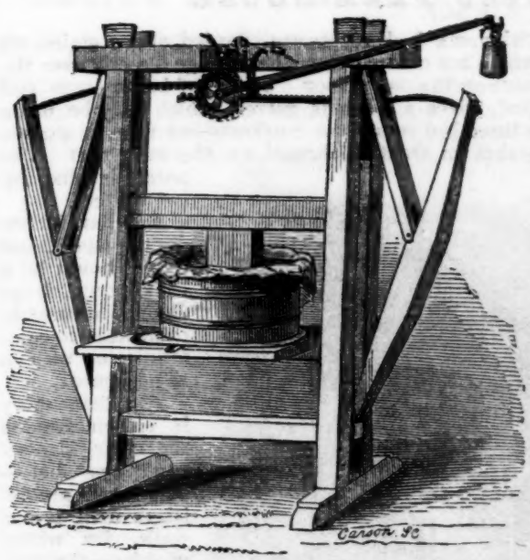
> "If then the distant clang of arms he hears,
> He paws, he bounds, he pricks his listening ears,
> Quivering his joints, and snorting with desire,
> Within his nostril rolls the thickened fire;
> Adown his crest his locks recumbent stray—
> O'er his right blade the bushy honours play;
> His horny hoof upturns the hollow ground,
> And rings the air in grave and solid sound."

Pliny says that the ears discover the intention of a horse; and Buffon remarks, that when a horse walks, his ears point forward; when fatigued, they hang down; and when angry, one ear points forward, and another backward. Every horse, he adds, turns his ear to that side from which he hears a noise; and when struck from behind, he turns his ears backwards. The notion of fire rolling within his nostrils, is highly descriptive of the natural appearance of these organs when the animal neighs or is much excited. This is occasioned by the unusual flow of blood, which becomes distinctly visible through the fine membrane with which the nostrils are lined. The thickness of the mane is noticed both by Varro and Columella.

The training of the horse, both for war and the race, seems to have occupied much time and attention, and to have been conducted with a degree of skill which could not have been attained without considerable study and experience. The steed, says Virgil, should first be accustomed to see, without fear, the arms of the warrior in fight, and to endure the clangor of the trumpet, to listen to the bridles rattling in the stalls, and to hear the rumbling of the chariots over the ground. When yet a colt, he should be soothed by kindly tones from his master's voice, and gently patted on the neck, till he comes to rejoice in being commended and flattered. At the beginning of his fourth year, he must be trained to run in the ring with measured pace, to bend his legs with ease, and to prance in "changeful curves." His speed must be gradually increased, till he seems to challenge the wind as he flees with ardor through the level meadow, unconscious of his reins, skimming so lightly as scarcely to print the surface of the sand.

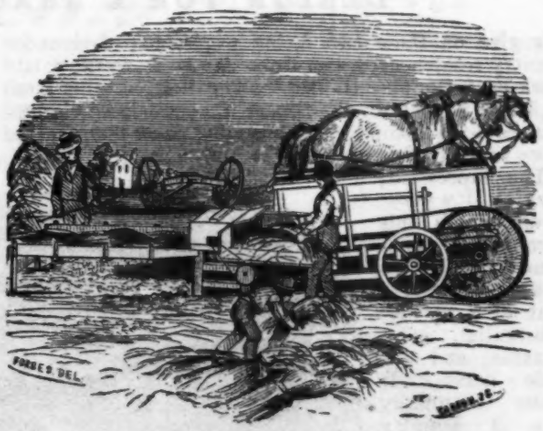
After having been thus trained, the poet directs that the animal should be plentifully fed with corn and other fodder, until the body becomes large and robust; but, he remarks, if pampered with corn before being trained, he will become high-mettled, and will, even, though held, rebel against the lash and the curb. Nothing, he further remarks, will more improve the strength of the males, than to keep them apart from the females.

HEAVES—Although there is no remedy for severe cases of heaves, yet horses may be so far relieved that they may appear to be cured, while under good management.



KENDALL'S CHEESE PRESS.

THE above cut represents an approved cheese press, for which the New-York State Agricultural Society awarded the first premium in 1848, and is, we learn, generally used in the counties of Herkimer, Oneida, &c., in this State. Its construction is a combination of levers working together, and so arranged as to give any desired amount of pressure. A suspended weight of twenty pounds, being sufficient to give a pressure of ten tons. They can be had of EMERY & Co., of the Albany Agricultural Warehouse. Price, $15.



HORSE-POWERS.

THE strength of horses is successfully applied in propeling machinery of various kinds. Stationary powers, on the plan of the horizontal wheel and inclined plane, or some of the various applications of the principle of the lever, have been used many years; but it is only within a few years that much attention has been given to those of a *portable* character. The best of this description are constructed on what is called the "endless chain" plan, which possesses the advantage of applying the weight and strength of the horse in the smallest practicable space. They are made for the use of either one or two horses at the same time, according to the power required. They are used for threshing grain, sawing wood, and other purposes. They are manufactured in this city, from whence great numbers have been sent to all parts of the country.

SIMPLE REMEDIES.

The following, with the exception of that for the bite of a mad dog, have all been tried in the family of the writer, and found very efficacious and valuable.

EAR-ACHE.—Laudanum and sweet oil on cotton wool, pressed into the ear.

CORNS.—Soak the feet in warm water, pare off as much as possible the horny part of the corn, then lay upon it a moistened wafer, and again upon this a piece of buckskin, with a hole cut through it the size of the corn. Renew the moist wafer twice a day, and in a very few days the corn will work out. This cure is complete.

BEE STING.—Apply mud.

RINGWORM.—Apply repeatedly a paste of common gunpowder with water.

BRUISES.—If the skin is not broken, camphor in spirits will soon remove soreness and inflammation; if the skin is broken, apply cold water repeatedly; if large and painful, apply warm water.

BURNS.—Small burns are completely cured in fifteen minutes, by holding on a piece of ice or snow, if applied instantly, before inflamed any.

STOPPING BLOOD FROM A CUT.—Apply lint, or flour with lint.

CURING A CUT.—Sewing up a cut, by taking a fine stitch into the insensible skin, from each side alternately towards the cut, will cure it usually in *one-quarter* the time otherwise required for its healing.

SORES FROM CUTS, are rapidly healed by means of the substance sold by druggists and known as *Coryle Extract*.

BITE OF MAD DOG.—Wash and cleanse the wound at once, and apply to every part dry nitrate of silver or lunar caustic. Every family should have a stick of it. This destroys both the poison and the flesh it touches, which comes away. If the wound is deep, sharpen the stick, that it may reach every part. William Youatt, author of the celebrated treatises on dogs, cattle, &c., was repeatedly bitten during his lifetime by mad dogs, mad cats, &c., but always cured the wounds in this way.

CROUP.—Ipecac and nitre has proved immediately effectual in all cases, and in a multitude of instances in the family of the writer. Let it be prepared by the druggist, and the precise size of the doses carefully observed—to be repeated every quarter hour till vomiting is produced.

MUSTARD PLASTERS are admirable for any local inflammatory disease, as *pleurisy*, *headache*, &c. They are often prepared wrong. The best way is to mix equal portions of ground mustard and Indian meal, and then pour on *boiling* water, so as to make a thick paste. Spread it on cotton cloth the intended size, and then lay on its face a piece of bookmuslin or lace, which will prevent its sticking.

BLISTERS are equally efficacious and incomparably less severe, when the plaster is removed before the blister has become filled, and while large white pimples are just making their appearance. Cabbage leaf is then applied, and the blister fills in a few hours, and is attended with very little pain.

SEVERE BURNS, accompanied with blistering or the removal of the skin, may be healed by the following admirable remedy. Pulverize the soft portion of a slice of bread, and boil it with sweet milk till it forms a soft paste. Spread it on a cotton cloth, and lay over the surface of this poultice a piece of bookmuslin, and then grease it with clean lard, to prevent sticking to the sore. Then, before applying, sprinkle thinly and evenly over it a little morphine and sugar of lead. This forms a very soothing and healing application.

REMEDIES FOR POISONS.

PREVENTIVE.—See that every vial or paper of medicine in the house is accurately and conspicuously marked, to prevent mistakes. If not already done, let the reader throw down this Almanac at once, and before eating another meal, or sleeping another wink, mark every thing in the house immediately. If there is any uncertainty about any thing, throw it far away. For the want of this care, nearly all the deaths that occur from poisoning originate.

DESIGN FOR A BRACKETED FARM-HOUSE.

We give on these two facing pages, two designs for country residences, taken from A. J Downing's late work on "Country Houses." The first, costing from $1,500 to $2,000, for the farmer in comfortable circumstances—the second costing $6,000 or $7,000, for the more wealthy class.

The impression, says Downing, (from whom this account is condensed) which this house produces, is that of a roomy, substantial, comfortable, and sensible house. It looks essentially like a country house, and while it has rather more dignity than most farm-houses, there is neither ambition nor ostentation visible in its exterior. On the contrary, the rather low and broad chimney stacks, and the truncated gables, show that there is a desire to avoid any especial affectation of elegance. It is, in short, a design which may be built in any part of the Union, and would be recognized as a country house of some importance—while it has no feature out of keeping with the position and life of a farmer in independent circumstances.

I. BRACKETED FARM-HOUSE, OF WOOD.

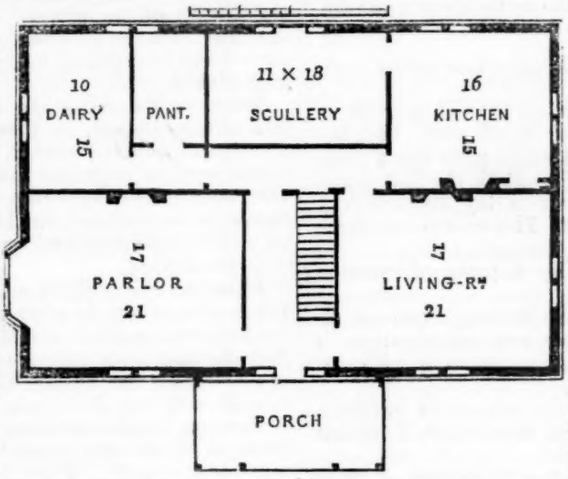
The interior arrangement of the first floor will be mainly understood by the plan annexed. The back door opens into the *scullery*—which may be a wash room or back kitchen. The passage from the kitchen to the dairy is lighted by a small sash of ground g'ass, placed in the partition of the scullery, exactly opposite the back door Where there is a separate building for a dairy, this may be turned into a bed room or nursery, making the pantry a milk room, and diminishing the size of the scullery.

On the second floor, a very similar arrangement is adopted. The room over the parlor being made into two by a partition, six bed rooms are afforded above stairs, all of which are entered from the passage directly over the passage on the main floor The roof being large and hipped, gives a spacious garret, which may be made into three bed rooms for workmen—or four, if a gable like that in front is formed on the rear roof. The porch is nine by twenty feet.

A cellar is under the whole, and there should be a back porch, large enough to contain, or at least to communicate with a wood-house.

The first story is eleven feet in the clear, the second nine feet — The rooms are finished with brown walls, for white-washing—the windows and doors finished with plain architraves, with simple back mouldings—the doors with four pannels on the first and second stories—the whole executed in a simple, plain, and substantial manner.

With planed and matched weather-boarding, and the whole filled in with brick. the cost at Newburgh is estimated at $2,000. At Rochester, where lumber is somewhat cheaper, the estimate, without any filling in, and without blinds or shutters, is $1,477.



A too frequent defect in cottages is pointed out by Mr. Downing, who says—"The cottage is not made to express, as much as possible, the simplicity of cottage life, joined with the greatest comfort, intelligence and taste, of which life is capable, but to imitate as closely as cheap and flimsy materials and a few hundred dollars will permit, the style and elaborate ornament of the villa, with its expenditure of thousands. All ornaments which are not simple, should be at once rejected; all flimsy decorations, are unbecoming the house of him who understands true cottage life."

HOW TO GROW RICH.

It is a sound remark, suited to all latitudes and meridians, and to all countries, tropical and frigid, savage and civilized, that men do not become rich by what they *get*, but by what they *save*. The merchant who sells by the thousand per day, and saves but one per cent, retains no more than he who sells by the hundred and saves ten per cent. For the same reason, some farmers with a few acres, actually make more than others on large farms. Let each farmer, then, begin the year by looking closely to the causes of waste. For instance—how many tons of hay are trodden under foot and wasted in ten years by his cattle, for want of feeding racks? How much is he yearly losing by a waste of manure—or, in other words, by making only half the manure he might? How much food is consumed needlessly in a year, to keep his cattle and sheep warm in winter, in exposed yards—one-third more being needed than in good shelter? What is lost for want of a good straw and stalk chopper? What amount is wasted for want of cleanliness and comfort for all domestic animals? What is the loss by the backward under-current, gradually lessening the worth of his farm by over-cropping and under-manuring—and by a want of a good rotation of crops? How much is he losing by not knowing the best mode of attaining all these desirable purposes—by not knowing how others have done it best—and which is so readily and thoroughly learned through a good agricultural paper?

Constant dropping wears away stone; by diligence and patience, the mouse ate in two the cable; and little strokes fell great oaks.

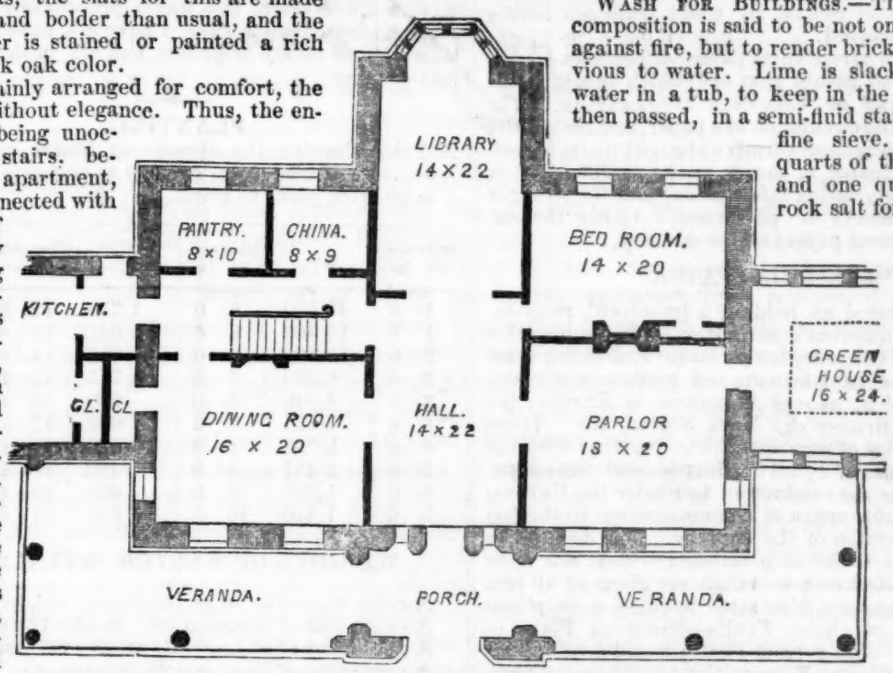
DESIGN FOR A COUNTRY HOUSE IN THE POINTED STYLE.

A sensible, solid, unpretending country house, with an air of substantial comfort and refinement, indicating intelligent domestic life in the country, is exhibited by this design. The broad and massive veranda—the full second story, overshadowed by the overhanging eaves—the steep roof, to shed the snow, and afford a well ventilated attic, and the tasteful and convenient appendages of conservatory for plants on one side, and kitchen offices on the other,—these are all expressive of the comparatively modest but cultivated tastes and life of substantial country residents in the older parts of the Northern States.

II. COUNTRY HOUSE IN THE POINTED STYLE.

The windows are plain box frames, with rising sashes, and outside blind shutters, adapting them precisely to our climate. To take away, however, the ordinary *Venetian* expression of common shutter blinds, the slats for this are made much wider and bolder than usual, and the entire shutter is stained or painted a rich brown or dark oak color.

Though mainly arranged for comfort, the plan is not without elegance. Thus, the entrance hall, being unoccupied by stairs, becomes a fine apartment, and being connected with a library of equal size, by large sliding doors, the effect of this suite of forty-four feet, when thrown into one, will be very agreeable on entering the house.



The greenhouse may be heated by the same furnace which heats the house—a ten inch hot-air pipe and a large register, running through the basement and entering by the floor or side of the green-house.

The second floor contains five large and excellent bed rooms, with a dressing room over the china closet, and a bath room over the pantry. The bed room over the hall is lighted by a fine oriel window, projecting over the front door.

This design demands solid walls, either of stone or of brick, colored or covered with cement. The hight of the rooms in the first story is thirteen feet; in the second, nine feet. If built with hollow walls, it will need no firring, and the partitions being eight inch walls, it will be nearly fire proof, and may be built about as cheaply with brick as with wood.—The cost, finished in the very best manner, would be from six to seven thousand dollars.

WASH FOR BUILDINGS.—The following composition is said to be not only protective against fire, but to render brick work impervious to water. Lime is slacked with hot water in a tub, to keep in the steam. It is then passed, in a semi-fluid state, through a fine sieve. Take six quarts of this fine lime, and one quart of clean rock salt for each gallon of water, the salt to be dissolved by boiling, and the impurities skimmed off To 5 gals. of this mixture add 1 lb. alum, ¼ lb. copperas, ¾ lb. potash added gradually, 4 qts. fine sand or hard wood ashes, and color to suit the intended purpose.

CORN FOR FODDER.

ONE of the most profitable crops which the farmer can raise, is corn for fodder. Every one which we have known, who has tried it the right way, declares he cannot possibly do without this crop; one ton of the dried fodder being nearly double the value of common cornstalk fodder. One of our neighbors lately assured us that he would rather have three tons of this for his cows, than four tons of the best hay. And yet, we have repeatedly raised it at a dollar and a half per ton when cured and dried, including in the cost, the interest of the land. It may be sown the first half of June.

Directions.—Plow and harrow—furrow with a one-horse plow in one direction, 2½ or 3 ft. apart—strew from a half-bushel hand-basket, at the rate of three bushels of seed per acre, along the furrows—cover with a harrow or cultivator run lengthwise—pass the one-horse cultivator between the rows when the corn is a foot high; all the weeds will soon be smothered by the corn, and no hoeing is needed. Mow, bind, and dry very thoroughly. Make very small stacks, to prevent heating—salt well. Four to six tons are yielded by one acre—the stalks being fine, all are eaten. Do not sow broadcast.

BENEFITS OF AGRICULTURAL PAPERS.

THAT most excellent maxim, "*make yourself acquainted with the business of your profession,*" is no less applicable to the Farmer, than to men in other vocations. The question very properly arises here, how can this knowledge be most readily acquired? We answer, by observation, by conversation with, and by reading the writings of each other. "*See what others are about,*" was the advice of a very successful farmer and stock-breeder. This should be done by *every opportunity*. There are some, who are inclined to distrust information derived from books and papers; yet they would not hesitate to adopt the same ideas if communicated by conversation. Is not this distrust, then, owing to an ill-founded prejudice and jealousy? But while we would urge the importance of inquiry, we would by no means advise a credulous assent to every story which may be heard or read. The minds of farmers should be so enlightened that they may be capable of judging for themselves, and by a careful discrimination, be able to select what is really useful and applicable to *their* peculiar condition. It is only by OBSERVATION, by READING, STUDY, COMPARISON, and REFLECTION, that this important faculty of discrimination can be acquired.

We recommend AGRICULTURAL PAPERS, as furnishing the best medium of communication among farmers. It is not the province of these papers to assume the character of *arbitrary teachers*. They should rather be regarded as furnishing to farmers a medium for the mutual interchange of ideas on the various subjects of practical husbandry. Each gives his views, his practice, or the results of his observation. These remarks, thus embodied and disseminated, furnish every man in turn an opportunity of comparing his own ideas and practices with those of others, by which *truth* can hardly fail of being perceived.

In choosing an agricultural paper, it becomes an important object to obtain that one which furnishes the GREATEST AMOUNT OF VALUABLE INFORMATION. The more extensive the circulation of a paper, and *the greater the number of practical farmers* engaged in its correspondence, the greater, of course, are its facilities for collecting and disseminating information, and the stronger are the inducements for patronage. Among the numerous agricultural papers of the country,

"THE CULTIVATOR"

must be considered as holding a prominent position. The number of different contributors to this publication in the course of the year, is very large; embracing some of the most successful farmers and gardeners of every State in the Union, as well as several in Europe, the Canadas, New-Brunswick, Nova Scotia, &c. These extensive facilities of correspondence, together with the advantages furnished by all the English and Scotch periodicals, enable the conductors to render the Cultivator a most valuable organ of communication to the farmers of every section of the country. The discoveries of scientific men, so far as practically tested, are from time to time made known—notices are given of all new and useful implements, illustrated by cuts—descriptions and engravings of choice Fruits—improved Plans of Farm Buildings—and correct Portraits and descriptions of Domestic Animals, Horses, Cattle, Sheep, Swine, and Poultry. It is the special aim of the conductors, to give PRACTICAL VALUE to the contents of THE CULTIVATOR, and the success of their efforts is shown in the liberal patronage the work has received. The pecuniary value of a single article, is often ten times more than the price of the volume.

Speaking of the advantages of agricultural papers, Mr. WIDNEY says: "By reading the Cultivator for the last eight years, I have derived a cash profit of at least *fifty dollars per year*, in the way of improved cultivation and farming economy generally."

"An intelligent and well informed gentleman from the South," says Hon. Z. PRATT, "once asserted that through the influence of the Albany Cultivator alone, the wealth of that part of the country had been increased more than two millions of dollars."

Dr. J. W. THOMSON, of Newcastle, Delaware, says that the influence of the agricultural society of that place, (largely assisted by the circulation of agricultural papers) has, in ten years, been the means of *doubling* the crops, or of adding more than a *million dollars* to the value of the stock and real estate of that county.

A correspondent in Otsego county, N. Y., says: "Owing to the circulation of agricultural papers, principally the Cultivator, in this section, within the last ten years, a decided improvement in the following, among many other things, is observable, viz: The operation of plowing is more neatly and thoroughly performed; more attention is paid to making, preserving, and application of manures, and an increase in the corn crop to 20 or 30 per cent."

JOEL HALL, an excellent farmer of Williamson, Wayne county, N. Y., says: "I save every year, at least four times the cost of subscription, by reading the Cultivator."

A farmer in Beaver county, Pa., says, that by the information derived from the Cultivator, he has succeeded in doubling his corn crop.

Another says: "I have received benefit enough from The Cultivator this season, to pay for it five years, by way of fattening hogs on apples and bran."

Another, being asked to subscribe, said: "It has saved me more than it has cost me. I offered a dollar an acre for mowing my peas; but seeing a way mentioned to gather them by a horse-rake, I tried it, and in half a day had two and a half acres in snug winrows."

A subscriber in Chautauque county says: "I have gained enough from two short articles in your paper, to pay for it five years. One was to prevent smut in wheat; since I adopted your rule, I have not raised a head of it, while one of my neighbors had six bushels of smut on two acres."

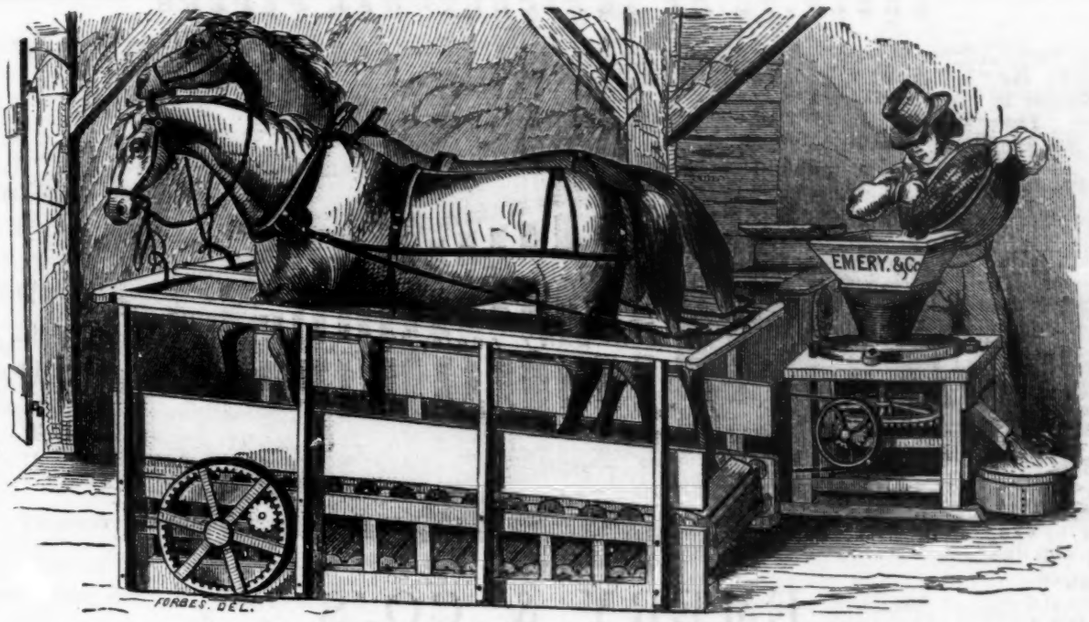
PLANTING.

A Table showing the number of Plants required for one acre of land, from one foot to twenty-one feet distance from plant to plant.

Distance. Ft. In.	No.	Distance. Ft. In.	No.	Distance. Ft. In.	No.
1 0	43,550	6 0	1,210	12 0	302
1 6	19,360	6 6	1,031	13 0	258
2 0	10,890	7 0	889	14 0	223
2 6	6,969	7 6	775	15 0	194
3 0	4,840	8 0	680	16 0	171
3 6	3,556	8 6	602	17 0	151
4 0	2,722	9 0	538	18 0	135
4 6	2,151	9 6	482	19 0	121
5 0	1,742	10 0	436	20 0	109
5 6	1,440	10 6	361	21 0	99

WEIGHTS OF EARTHS, METALS, &c.

A cubic foot of loose earth or sand, weighs 95 pounds.
A cubic foot of common soil, weighs 124 pounds.
A cubic foot of strong soil, weighs 127 pounds.
A cubic foot of clay, weighs 135 pounds.
A cubic foot of mason's work, weighs 205 pounds.
A cubic foot of distilled water, weighs 62.5 pounds.
A cubic foot of cast iron, weighs 450.45 pounds.
A cubic foot of steel, weighs 489.8 pounds.
A cubic foot of lead, weighs 709.5 pounds.
A cubic foot of platina, weighs 1.2 8.75 pounds.
A cubic foot of copper, weighs 486.75 pounds.
A cubic foot of cork, weighs 15 pounds.
A cubic foot of tallow, weighs 59 pounds.
A cubic foot of oak, weighs 73.15 pounds.
A cubic foot of brick, weighs 125 pounds.
A cubic foot of air, weighs 0.0753 pounds.
A hand used in measuring the height of horses, is 4 inches.



EMERY & CO.'S

LATEST IMPROVED RAILROAD HORSE-POWER,

AND

OVERSHOT THRESHING MACHINE AND SEPARATOR,

TO WHICH WAS AWARDED

THE FIRST PREMIUM

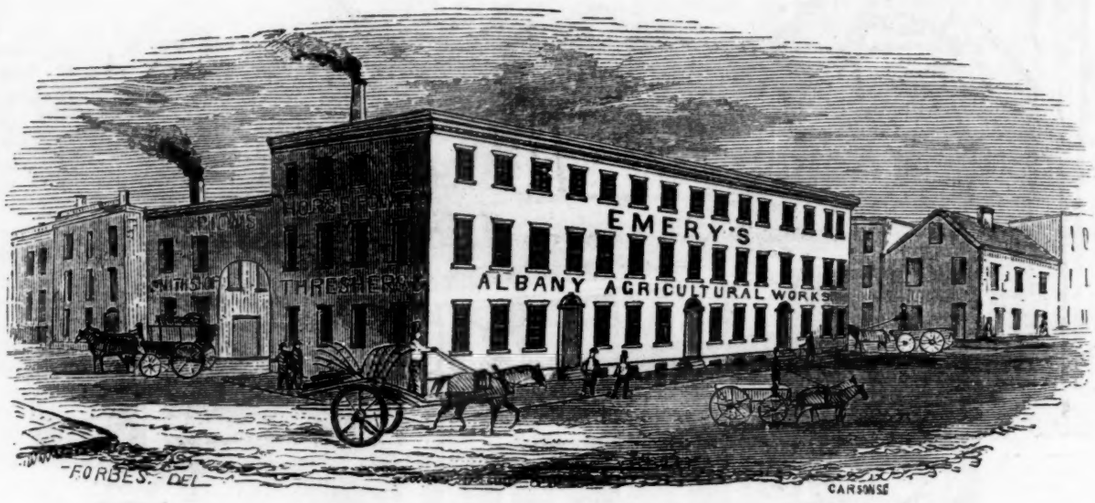
OF THE NEW-YORK STATE AGRICULTURAL SOCIETY.

THE subscribers are gratified to be enabled to present the public with the best possible testimonial of the superiority of their *Recently Improved Railroad Horse-Powers*, in the form of the *First Premium* of the New-York State Agricultural Society, at their Annual Fair, held near Albany, on the 3d, 4th, 5th, and 6th of September, 1850, where they were exhibited each day in competition with Wheeler's latest Improved, (still made and sold by us) and the principal other approved Powers, on the endless chain principle. After being thoroughly examined by a competent committee of practical Farmers and Mechanics, the committee (unbiassed by former awards of the Society to some of the kinds on exhibition) unanimously awarded the Society's *First Premium, of Money and Diploma, to* EMERY & Co., *for superiority of mechanical construction, strength, durability and power.* The above cut represents this most useful Machine, FOR WHICH PATENT HAS BEEN SECURED, with the latest improvements, embracing some of great importance, which have suggested themselves from time to time, as the various kinds made and sold by us have become used, worn, or failed.

The most important of these consist principally in the new mode of applying the power and motion from the endless platform to the shaft of the main driving pully, and obtaining the necessary motion for the Overshot Threshing Machine, without crossing of bands or intermediate gearing, and at the same time dispensing with the small pinions and cogs upon the links of the endless platform, thereby combining greater strength and durability with lighter friction, without the liability of breakage of links, or the wearing of links and pinions, (no small item in the expense of repairs in most other kinds of powers in use.) The farmer or mechanic is enabled to perform a greater amount of work, and to operate them with less expense of power or elevation, as best suits his wishes.

They were introduced to some considerable extent in the harvests of 1848 and 1849; and wherever used, side by side with the most approved Powers of other kinds, have given unqualified satisfaction and been preferred.

The Overshot Thresher and Vibrating Separator, with improvements, have been sold with like success as the Powers. They admit of a level feeding table, thus avoiding accidents, which often occur with the inclined feeding board, by preventing hard substances, sticks, and stones, from getting into the machine and breaking spikes, endangering those engaged with them. The cylinder shaft (cast steel) runs in bronze boxes, which are so made of two parts as easily to be adjusted when worn loose, and can with little trouble always be kept tight. The speed of the power is such that a larger pully is used on the Thresher than on most others—driving stronger, with less liability of slipping of bands, which last are made of vulcanized India rubber. The Separator makes a complete separation of grain from straw, leaving it in best condition for the fanmill; saving the labor of several men, and doing the work better. Fanmills of various sizes, for hand or fitted to be driven by the power at the same time. For further particulars, prices, &c., see Catalogue of Albany Agricultural Works, Warehouse and Seed Store; gratis, on application by mail or otherwise, to **EMERY & CO.**, 369 & 371 Broadway, Albany.



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Their Warehouse and Seed Store is one of the most spacious in the city.

They pledge themselves that they will continue, as heretofore, to recommend and sell only such articles as are really worthy of introduction and use, or seeds that are valuable to be grown; and are willing to stake their reputation as manufacturers and dealers, upon the merits and satisfaction given by such articles as are sold by them; all of which they feel no hesitation in warranting to the purchaser.

Their Descriptive Catalogue, containing upwards of 100 finely executed engravings, delineating many of the leading articles of the trade, as also descriptions and prices, will be furnished gratis to all, on application by mail or otherwise.

Farmers and dealers will find it to their interest to examine our stock and prices, before purchasing elsewhere.

EMERY & CO.,

November, 1850. *Nos. 369 & 371 Broadway, Albany, N. Y.*